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INDIGESTION—DUE TO ORGANIC DISEASES.

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In a previous article attention was called to "Indigestion due to Nervous Influences." At this time it is proposed to allude to the importance of searching for the cause of indigestion in organs more or less remote from the alimentary tract. In the present age it may seem superfluous to make allusions of such a character, but the fact is, too much can never be said regarding the omission of seeking causes and the commission of treating symptoms instead of the disease.

It is remarkable to what extent indigestion, of greater or less severity, may be dependent upon different forms of organic disease. In many instances it is difficult to explain why this is so, while in a larger number of cases it is difficult to detect the existence of any organic disease, owing to masked symptoms, and a general obscurity not unusual in the different stages of structural changes. Hence, there constantly exists the importance of bearing such facts in mind, and of making frequent and thorough examination whenever indigestion is marked and persistent.

The detection of organic disease of the heart not infrequently overturns a previous diagnosis of simple indigestion. When such is the case, it is found that indigestion has existed as a correlative symptom, and one that is usually due to disordered circulation, caused primarily by pericarditis, hypertrophy, valvular lesions, or, possibly, by a combination of the two latter. Pericarditis, as many doubtless know full well, is often difficult to diagnose. A marked peculiarity of the disease is the fact that, in many instances, pericardial symptoms are latent, while prominent symptoms are developed elsewhere. In some cases the heart affection is scarcely distinguishable from pleurisy, in others, delirium may be so marked as to mask the heart symptoms, and, lastly, it may give rise to such distinct evidences of acute gastritis as to deceive both patient and physician. In the latter instance there will usually be persistent nausea, vomiting, epigastric pain and tenderness, of a character well calculated to obscure a latent or illy defined cardiac affection.

Of the more chronic forms of heart disease, hypertrophy not infrequently produces disturbances of digestion even before the heart symptoms attract attention. In instances of this nature increased arterial pressure causes hypercirculation and hypersecretion along the alimentary tract, followed by loss of appetite, a sense of fullness after eating, and more or less nausea and vomiting. But of all the forms of heart disease, dilatation accompanied by valvular lesions causes the most marked derangement of the process of digestion. Sooner or later, as a rule, the functions of digestion and nutrition will become impaired, and persistently exist as a general characteristic symptom of the primary disease. Many cases are recorded where loss of appetite and distention of the stomach preceded symptoms referable to an affection of the heart. Thus a gentleman, about fifty years of age, who had led a gay and somewhat dissipated life, noticed that he experienced difficulty in breath-

ing. He complained also much of loss of appetite and distention of the stomach. There could not be found any cause beyond flatulence to account for this; the abdomen yielded all over an extremely tympanitic sound. But to the dyspnœa, an inquiry into the state of the heart furnished a clue (Da Costa). It is, however, in the more advanced stages of valvular lesions that indigestion exists as a prominent symptom. Insufficiency and regurgitation causing constant stenosis of the venous system often sets up a catarrhal condition of the stomach not greatly unlike an idiopathic gastric catarrh. In a recent case of valvular lesion, seen by the writer, the regular medical attendant had been misled by the gastric symptoms and had administered freely agents intended to overcome what appeared to him to be "biliousness."

When the valvular lesions are sufficient to give rise to dropsy, the gastro intestinal symptoms are still more marked. Hence it has been said that the loss of albumen and salts has the effect to prevent osmosis into the vessels of fluids in the tissues, which therefore accumulate, and the hepatic derangement and chronic gastric catarrh, which interfere very seriously with digestion and absorption of products. The appetite is either wanting or capricious; food distresses the stomach; the intestines are filled with gas, the result of decomposition of different forms of food; and diarrhœa, which nothing controls permanently, comes on toward the close (Bartholow). Hence, among the exciting causes of dyspepsia must be reckoned diseases of the heart, nearly all of which, in their latter stages, are accompanied by a disturbance of the digestion, tending to accelerate the fatal issue (Trousseau).

Again, indigestion may be a marked symptom of organic changes in the lungs. Unfortunately, a certain form of cough is sometimes associated with indigestion, and, as a result, many cases of phthisis are unrecognized for a long time, owing to the inference that the cough is simply a "stomach cough." The fact that indigestion and a real phthisical cough may precede subsequent marked evidences of pulmonary disease is lost sight of. Indigestion and coughs, being thus deceptive at times, call for a careful and repeated investigation of the lungs whenever these symptoms are found to exist. In a résumé of the general symptoms of consumption it has been said, the digestive organs are generally out of order. Loss of appetite, thirst, and dyspeptic symptoms are often complained of. Not uncommonly, the mouth, tongue and throat are red and irritable, this being accompanied with signs of subacute gastritis. The tongue is frequently more or less furred. In some instances the stomach is extremely irritable, retching and vomiting being immediately excited when anything is taken (Roberts).

Again, in the "Clinical History of Phthisis," the following admonition has been given: As regards appetite and digestion, there is much diversity in different cases. In general, the desire for food is diminished, and the ability to digest food impaired. In some cases there is almost entire loss of appetite, and even a repugnance to food. This is an unfavorable feature of the disease. Disorder of the digestion is sometimes so prominent as to appear to be the chief malady. The physician should be on his guard against considering cough, in such cases, merely dyspeptic or sympathetic (Flint).

Intestinal indigestion may also be one of the primary symptoms of organic disease of the lungs. Upon this subject the same author has observed: Diarrhœa occurs in the first stages (consumption) in a certain proportion of cases. It may exist with and without tuberculous affection of the intestinal canal, usually seated in the small intestines. Persisting or frequently recurring diarrhœa, accompanied by cough, be the latter never so slight, should excite suspicion of pulmonary phthisis, and the existence of this affection being ascertained, a tuberculous affection of the intestinal canal, as a secondary affection, is probable (Flint).

Thus do some of the great teachers of the profession emphasize the frequency of indigestion preceding or existing as a symptom of organic disease of the lungs. Such facts and such authority declare the importance of alertness and skill in diagnosis, in order that the physician may find for himself what has not been observed by the patient.

That indigestion is usually a symptom of functional and organic diseases of the liver is well known both in and out of the profession. In fact, it is too well known out of the profession, inasmuch as limited information tends to cause many persons imaginary "spells" of "congested liver," "torpid liver," and "biliousness." Not often is the liver overlooked when symptoms of indigestion exist. In too many instances is it referred to not so much for what it discloses as for what it conceals. An organ so admirably located and adapted for the concealment of ignorance, and so inspiring to the reflections of the superannuated, will ever hold the attention of the wise and the otherwise. Being thus an organ well known, and at the same time not well

known, makes it all the more necessary that its symptoms should receive intelligent study. Among the special diseases of the liver, acute congestion often, or perhaps invariably, deranges digestion. Under such circumstances indigestion will be characterized by a coated tongue, nausea, vomiting, loss of appetite and disturbance of the bowels. Indigestion due to chronic congestion of the liver is very common. In this morbid condition indigestion may be so marked as to simulate chronic gastritis. As in acute congestion, there will be a coated tongue, impaired appetite, nausea, constipation or diarrhœa, and besides, more or less pain in the region of the stomach and liver. It has been clearly stated that chronic hepatic congestion, as, indeed, any disease of the liver which leads to its enlargement, may be confounded with chronic gastritis; and on account mainly of the fullness in the epigastric region which may happen in the hepatic malady, and which is so constant in gastric affection. (Da Costa).

Likewise, indigestion may, for a long time, be the chief symptom of cancer of the liver. There is, usually for an indefinite period, most of the gastro-intestinal derangements mentioned above, and until unmistakable pains, together with no dules, or marked enlargement, is detected in the organ, it will be very difficult to say why persistent indigestion should exist. Digestive derangements are necessarily present in most cases, and they frequently first attract attention. The cancerous cachexia is usually well-marked, being accompanied with rapid wasting, debility, and anæmia (Roberts).

The early stages of cirrhosis of the liver rarely give rise to symptoms which establish the disease beyond a doubt. As a rule, it is not until dropsy becomes evident that cirrhotic degeneration can be determined. But in all cases there are, from the first, many symptoms of indigestion. These symptoms vary in number and severity, from nausea and vomiting to extreme gastro-intestinal derangements. There is often persistent nausea, vomiting, chronic gastric catarrh, pain in the region of stomach and liver, occasional vomiting of blood, and attacks of diarrhœa. In addition, it may be said: Again, in other cases, before symptoms referable to the liver manifest themselves, gastro intestinal disorders, gastro-intestinal catarrh, occur. The appetite is poor and food occasions distress; there is acidity and acid matters are regurgitated; often, in the morning, there is much nausea and great straining, some acid, glairy mucus and bilious matter, coming up after much effort. The bowels are sometimes relaxed, sometimes constipated, and now and then blackish, tar-like, semi-solid discharges occur (Bartholow).

Indigestion attended with hemorrhage from the stomach, may also be due to a cirrhosed liver. In such instances interference with the portal circulation has caused more or less congestion of the entire surface of the alimentary tract, which, at times, may be so extreme as to rupture capillaries of the stomach, and thus produce hemorrhage. Thus hemorrhage from the stomach and bowels is an occasional event. Gastrorrhagia occurred in six out of forty cases analyzed, the histories of all cases not being complete (Flint).

From these brief allusions to a few of the diseases of the liver, it is evident that indigestion is dependent thereon. Moreover, the mind must be struck by the following impressive words: Dyspepsia is a very usual epiphenomenon of disease of the liver, and it is easy to understand that an organ which is the largest gland in the body is immediately related to the stomach, performs a very important part in digestion, has exceedingly intimate sympathies with the other parts of the gastro-intestinal apparatus. It is easy I say, to understand, that the disturbed action of which it is the seat reacts more or less powerfully upon the functions of the stomach. Hepatic will often be taken for gastric pains. The occurrence of errors of diagnosis are quite accounted for by what we know of the relations of contiguity between the stomach and liver (Trousseau).

The kidneys are chief among the organs which tend powerfully to influence digestion. When different organic changes attack these important organs, indigestion invariably ensues, giving rise to symptoms calculated in the highest degree to deceive both patient and practitioner. In very many instances, the symptoms referable to the organs of digestion will be most marked, while those pertaining to the kidneys attract no attention until renal disease is far advanced. By way of illustration: This was a case of a single lady, aged forty-three years, seen by one of us, in connection with an eminent physician of Philadelphia. She had been, at times, under his care for a year, with dyspeptic symptoms, but otherwise appeared in fair health; there was not a particle of dropsy. Spending the summer at the seashore, she had not been under observation immediately before the fatal illness, and sent for her physician in consequence of nausea and vomiting, and some shortness of breath. A marked pericardial friction sound was detected,

and an examination of the urine showed it to contain about one-third of the test-tube full of albumen and granular tube casts. The malady became now as markedly vehement as previously it had been latent; twitching of the muscles, followed by general convulsions, set in. These were succeeded by uræmic coma, and death took place about a week after the development of pericarditis. The post-mortem examination proved that the kidney disease was of long standing, and that the contraction of the organs had advanced very far (Da Costa, Longstreth).

In cirrhotic disease of the kidneys, which, above all other forms of renal affections, is latent and deceptive, indigestion, persistent and severe, may long precede any clinical evidences of the real disease. For months before the diseased state of the kidneys is recognized, there may be impaired appetite, acidity, vomiting and persistent constipation. It has been observed that, at first, in this disease, the appetite and digestion are good, and the nutrition of the body continues unimpaired. Presently, distress after eating, even epigastric pain, flatulence, and irregularity in the stools, are experienced. Acidity, pyrosis, depressing nausea with headache, come, as the case progresses, to be very constant symptoms. The body weight declines, the skin becomes dry, scurfy, and of a dead yellowish-white or fawn color, and the hair appears dry and lifeless (Bartholow).

Indigestion invariably precedes or is associated with the development of some of the other forms of organic diseases of the kidneys. But the "waxy" and "fatty kidney" give rise to indigestion, usually of a marked and distressing character. Thus, in the "Clinical History of Chronic Bright's Disease," it is said: Symptoms referable to the digestive system are more or less prominent. Indigestion or dyspeptic disorder is common. Flatulence of the stomach is a frequent symptom. Vomiting is a prominent and persistent symptom in certain cases. It is referable to the vicarious elimination of urinary principles by the gastric mucous membrane. It may be preceded or accompanied by other symptoms denoting uræmia, but it is sometimes the chief uræmic manifestation. The uræmic vomiting occurs when the stomach is empty, and often early in the morning. The acts of vomiting are apt to occur suddenly and violently, without much previous nausea. These circumstances connected with vomiting should always excite suspicion of renal disease, although no other symptoms pointing to the kidneys are apparent (Flint).

Doubtless there are many cases of indigestion dependent upon a torpid or congested state of the kidneys. There may be entire freedom from structural degeneration, but rather a condition existing which tends to retard the full excretion of urinary elements. Hence, in many cases of indigestion, when remedies are given to stimulate and restore the gastro intestinal secretions, much good can also be done by gently stimulating the renal functions and thereby relieving the system of pent-up accumulations. Renal affections, or to speak more correctly, affections of the urinary apparatus, are likewise frequent causes of dyspepsia, particularly of old men. When consulted by elderly patients who complain of impaired digestion, loss of appetite, gastric pains, belching and vomiting, direct your attention to the state of the kidneys and bladder, and you will often find that the only urinary symptom complained of is a habitual retention of the urine (Trousseau).

There is also one more organ to which reference will be made in a few words. The frequency of indigestion as symptomatic of both functional and organic diseases of the uterus makes it almost unnecessary to allude to the fact. This organ at times exerts a most powerful influence upon the entire female system, but the effects are usually most marked upon the functions of digestion. There is hardly a diseased condition of this organ that is not attended by gastro-intestinal symptoms, such as impaired appetite, flatulence, nausea, vomiting and constipation. These facts are familiar to every practitioner, and need no confirmation from the great teachers of the profession.

It is probably safe to say that indigestion is the most common complaint which the physician is called upon to treat. It is a disorder that may exist as a distinct affection of the alimentary tract, or it may be symptomatic of nearly every functional and organic disease to which the system is liable. Many diseases exist for a long time in obscurity, and this symptom, above all others, tends to lead or mislead. Such facts, together with the statements of some of the most eminent authorities in the world, point to the necessity of patient inquiry into the cause of indigestion whenever found to exist. True, indigestion is so common and has so many causes that, in many instances, it means little or nothing, but the possible fact always remains that it may exist preëminent as a symptom of deep-seated and obscure disease. To examine every patient intelligently and thoroughly is imperative. Nothing that tends to unravel disease or to help human beings is useless. There is nothing great

in medicine excepting faithful work and utility. Honest, patient, intelligent investigation into the causation of indigestion requires much general knowledge and special training, but it constitutes largely the average success of practitioners, for the reason that this class of cases are so common. "The truth is, to be successful in any profession, one must have what has been called 'an almost ignominious love of details.' It is an element of effectiveness with which no reach of plan, no loftiness of design, no enthusiasm of purpose can dispense."

HEADACHE AND NERVOUS EXHAUSTION, ITS CAUSE AND CURE.

BY EDWIN W. HILL, M.D.,
Of Glen Falls, N. Y.

It is a lamentable fact that, until within a recent date, the medical profession have been at least two generations behind the times in which they lived; and even now the older members look with distrust (to say the least) upon the younger portion of the fraternity who are anxious to get up to the times and avail themselves of any means to cure their patients. When Prof. Donders explained to the profession that defects of vision caused so much nervous suffering in the world, how was it received? Was the subject thoroughly investigated, and so proven to be either correct and adopted or incorrect and rejected? I think not. And even now only a few of the more advanced members are willing to leave off drugging and look to other sources for the cure of the patient. And here let me copy the words of Dr. Jones, of the Queen's University, Cork, Ireland, "How many an unfortunate might escape a world of drugging if the practitioner could recognize the effects of astigmatism in the headache, the dizziness, the inability to work, symptoms so often referred to the stomach—all corrected by suitable glasses." Yes, the time has come when the more enlightened part of our people have refused to allow their physician to practice the heroic treatment. It is no longer a theory, but a known fact, that headache, whether habitual or periodic, spinal irritation, dizziness, insomnia, nausea, inability to do mental work, general failure of health, and not a few of the many cases of St. Vitus' dance, are due to eye strain, and can only be permanently cured by the correction of the visual powers, and so remove the cause of irritation. The eye strain may exist and still the patient never experience any pain in the eye itself, just as in hip joint disease the seat of the trouble is in the hip and yet the painful part is the knee. Again, eye strain may exist for a very long time and cause no disturbance whatever, until the general health is weakened, either by mental or moral causes.

I prefer to prove these points by cases treated by myself, rather than bare assertions, and so I will give some in detail.

The following case, Miss R., the beloved granddaughter of an M.D., I will give in the words of the Doctor himself:—

"In accordance with your expressed wish for a concise history of her case up to the time she came under your care, I will now give it to you. Miss I. C. R., of Moreau, Saratoga Co., N. Y., aged 24 years, light complexion, brown hair, blue eyes, nervous temperament, etc., etc. For six years previous to June, 1875, she attended school. She was a close student and indefatigable in her efforts to succeed. Her health began to fail before half of her term of scholarship was finished; still she would not give up, and struggled on, having a severe pain in the head, neck and shoulders; through the eyes, at times, it was piercing and unbearable. She had set her mark and was not to be deterred from attaining it. She succeeded, as many others have done, with health, mind and constitution weakened. She graduated in June, 1875, and since has been striving to recuperate; at times she has, in a measure, succeeded, and enjoyed a fair degree of health, but still the old pain in her head, eyes, and along the spine has continued.

"During the winter of 1876 she had an attack of congestion of the brain, and was confined to a room, without a ray of light, for six weeks. It was four months before she was able to sit up all day. She made a fair recovery, only there was great nervous excitement and the least exertion would cause a day's sickness in bed. Since her long sickness, generally in the winter, she has had a slow nervous fever, lasting from three to five weeks. During the past winter the pain in the head has been intense and constant, but for short intervals, the eyes frequently becoming obscured and the brain confused; I feared permanent injury to the brain. Upon the advice of a lady friend of hers, whom you had cured, I, although skeptical, sent for you to come and examine her case. And when you said you could cure her I had fearful doubts. And now, after an absence of seven weeks, she has returned, the pain in the head gone, and for the past five weeks she has not had as much pain as before she had in an hour. The circulation perfectly restored, the heat in the head is gone, the extremities are warm, and a perfectly normal con-

dition of the whole system; her strength is improving, appetite good; for all of which she cannot be too grateful to Dr. Hill.

"Yours, B. F. CORNILL, M.D."

Upon examining Miss R. I found that there was just eye strain enough to prevent her ever getting strong, and I found from the examination no other cause, and therefore I could, with assurance, say this is a case that I can cure. She has since attended the Doctor in a painfully protracted and fatal illness, and her strength is good and she well.

Miss J. C., the daughter of a wealthy manufacturer, a well developed, healthy looking young woman, consulted me, complaining that she had struggled through her education with constant fatigue and headache, and for the last year the pain in the lower part of the back had been so severe that she feared some spinal or uterine disease. She had been at home about a year, during which time she had been a good deal under the family physician's care, on account of the pain and her nervous condition. She had a pair of glasses that she had tried to wear, and see if they would help her. They did not accurately correct her defect, astigmatism, therefore, they did no good, if they did not make her worse. I corrected her astigmatism with a (— cyl.) glass that she wears constantly. The internal recti muscles of the eye had become very much weakened, from overwork; these I strengthened by the prism exercise, and in four weeks, instead of the poor nervous sufferer that she had been, she commenced taking painting and music lessons again; a thing she assured me she never expected to do.

Mrs. M. B., aged about forty-five years, came to my office complaining that ever since her married life she never had gone over a month without having a sick headache, which would last sometimes for three days, during which time she would be almost blind with the pain, from the light striking into her eyes. Again, sometimes, she would have the headache almost every week of the month, for a day or so. After taking twenty prism exercises, she went a whole year without the headache returning.

Miss J. W., one of our most educated and refined ladies, consulted me as to what could be done for her, and it was a sad history; a life spent in hard work and close application to study, that she might enjoy the company of the best men by reading them through, finds herself a wreck, unable to sleep at night, and when sleep did come a troubled sleep. If she indulged in an evening entertainment then a sick headache was sure to follow the next day. Nervous and fretful in the extreme. I am pleased to say that the prism treatment has restored her to health and strength.

Mr. J. H., aged about 48, a prominent business man of his town, came to me to be fitted for a pair of glasses. I found that the left eye was slightly astigmatic, the right normal, and still he said that it was getting to be quite troublesome for him to read very much of an evening, as the words seemed to run together and look blurry. He also informed me that when they commenced business he did the book-keeping for the company, and that when he had to confine himself pretty closely to work, as at pay time, then he always was sick and nauseated, and had what they called a bilious attack, which would last from one to three days, but since they have kept a book-keeper he has been free from the attacks. Had his physician in his observation thought of cause and effect, and recognized that the bilious attack always followed close work in the office, and sent him to an ophthalmic surgeon, who would have corrected the slight astigmatism, $\frac{1}{60}$, by a (+ cyl.) glass, he would from that day have been cured of his bilious attack. To show that this is no bare assertion of mine I will quote a parallel case from Dr. S. Weir Mitchell's Report of 1876.

Mr. B., a prominent merchant, consulted me for pain in the upper spine and occiput. It increased day by day every winter, and left him during his summer, which was spent in fishing and shooting, a tent life, in fact. Mr. B. was even cauterized in New York for these pains, and here at home had much able advice besides my own.

When I first saw him I was thoroughly misled. It was late in the winter, and, as usual, while in the autumn only writing, at first, and then later, reading, and then any near work, caused pain, as time went by there came a time when all mental labor, when excitement, emotion, or any thought, caused pain. He was in this over-sensitive state when I saw him, and was aided by nothing I did. His holiday cured his head, and on his return some friend, I believe, suggested to him that his eyes might be weak, and with this idea consulted Dr. W. Thomson, who gave me the following additional particular from his note-book: "Writing has become so distressing to this gentleman that for a year past all letters have been written by a secretary, at his dictation. He states that a few moments spent in writing gives him a creeping sensation up the spine and through the back part of the head, followed by giddiness and severe pain, so urgent as to render him fearful of

a fit of some kind. His sight was, for distant objects, $\frac{1}{3}$, and was improved by a concave cylinder glass $\frac{1}{18}$, which he had obtained from a prominent ophthalmic surgeon, and with this his sight was $\frac{1}{1}$, or up to the normal standard; but despite this success his headache and other nervous symptoms were unrelieved.

It was suspected that this would prove to be a case of compound astigmatism, and that he had overstated the myopia on the previous examination, and that the diagnosis had been considered correct by obtaining the full sharpness of sight by a $\frac{1}{18}$ cyl. It was conceived that there might be latent hypermetropia, and that in overcoming a long-sighted meridian he would overstate a myopic one, and thus be provided with a correction for short sight, which would give sharp sight, but leave him hypermetropic, and, therefore, oblige him to keep his ciliary muscle in vigilant and constant exercise in viewing distant as well as near objects.

On paralyzing his accommodation with atropia this was found to be correct, and the hypermetropia was found to be $\frac{1}{36}$; his formula for the astigmatism was $+\frac{1}{36} \supset -\frac{1}{16}$ cyl. ax. 1°, and this correction gives him an acuity of vision $= \frac{15}{x}$ or above the average standard. On using these glasses habitually his distressing symptoms quickly disappeared. He has long since forgotten his apprehensions of an impending apoplexy or epilepsy. He can see as sharply as any of his companions, and he can use his eyes continuously in reading, writing, or other near work. Relief in this case followed, at once, the use of the glasses, which proved competent, without other means, to conduct him to perfect and useful health again.

In conclusion, let me again draw the attention of any who may read this article to the important facts—

1st. That headache, whether habitual or periodic, is in the great majority of cases due to eye strain.

2d. Eye strain, when it exists, will always cause the following train of symptoms: Pain in front or back of head; pain along the spine; nausea; insomnia; nervous irritability, nervous prostration, and often the following: Neuralgia of the head and face; palpitation of the heart, and atonic dyspepsia, all of which are not cured, but only relieved, by drugs. But remove the strain, either by glasses or prism treatment, or both, and you cure the patient.

—The heat has greatly increased deaths from tetanus and nervous diseases.

ON SOME POINTS IN THE MEDICAL TREATMENT OF HABITUAL CONSTIPATION.

BY J. W. HICKMAN, M.D.,
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The importance of being able to treat successfully the ailment in question cannot easily be over-estimated. Besides being a very common disorder, it is one that frequently taxes to the utmost the resources of the practitioner. Perhaps the error most frequently committed in its management is the indiscriminate giving of purgatives. Rarely does a patient apply to the physician for relief before he has given himself over to persistent purgation, and yet he not infrequently presents himself expecting further treatment in this direction. And too often, it must be admitted, is the physician led into such indiscreet practice. To serve more than a temporary purpose, active purgatives should find no place in the treatment of habitual constipation. Indeed, it were well, in most instances, if this class of drugs were altogether dispensed with in this connection. The temporary relief is more than counterbalanced by their harmful effects in even the most favorable instances. By their use we have, not infrequently, induced a chronic intestinal catarrh of a very intractable sort. Instead of restoring the bowel to its normal state, either with reference to the secretions or to contractility and tone, we find the torpor and general impairment of function intensified. Nor can they fail to disorder the digestive and nutritive functions.

As to laxatives, properly so-called, the verdict must be different. Both medicines and foods of this character, either alone or with other treatment, are very frequently of service, and occasionally are positively indicated. Especially is this true of the initiatory measures. In this paper we do not pretend to delineate every form of medicinal treatment, but it shall be our purpose to mention those agents which we have used extensively and have found to be of real service.

As coming first in the list, the writer must frankly confess his preference for belladonna. He, of course, does not mean to imply that it should be regarded as a specific, but that it will be found effectual in a vast majority of cases. In prescribing belladonna, two considerations must engage our closest scrutiny. In the first place, we should know that we have a pure drug, for it is well known that a large proportion of the belladonna preparations in the market are of an inferior grade. In the second place, the manner

of prescribing has much to do with the result. Prof. Da Costa, in a recent clinic, prescribed one drop of the fluid extract in one drachm of the compound tincture of cinchona. This I have tried repeatedly and with marked success. The belladonna may also be combined with other vegetable bitters, but for some reason it is more effective when given in Huxham's tincture. Instead of one drop of the fluid extract we may give four drops of the tincture, with equal confidence. Dr. Da Costa also advised, in connection with the above, one tablespoonful of sweet oil at bedtime, until the bowels became regular. This is a fair expedient, but I have been unable to see that it exerted any specially favorable effect. A laxative diet for the first few days is of more service. It must be admitted that it is not just easy to foresee in what cases belladonna may succeed or may fail, but that it may be used with confidence in a majority of cases, if given in proper dose and in purity, there is no question.

Another agent of value is nux vomica. Its results are somewhat variable, however. It is most useful in those cases attended with tardy digestion, flatulence and swelling of the belly. It is also serviceable in those instances of constipation occurring in those who are given to hypochondria, and are visited by quasi-paroxysmal pains through the stomach and bowels. It should be given just before meals, in the form of tincture; or, instead, five, six, or eight drops of the preparation known as the bitter liquor of Baumé may be prescribed.

We have also seen excellent results from the following:—

℞. Ext. nucis vomicæ,
Ext. belladonnæ,
Ext. physostigmatis, āā gr. v.
Ft. pill. No. xij. M.
Of these one should be given at bedtime.

In the treatment of constipation sometimes attendant upon chlorosis, no remedy so well answers the indications as aloes. In addition to the usual treatment, we may with marked advantage add from ½ to 1½ grs. per day. If there be amenorrhœa the aloes will serve a twofold purpose; it will assist the *prima viæ* to a better performance of function, and, being an emmenagogue, it will tend to restore or inaugurate, as the case may be, a regularity of the menstrual flow. If with the above condition of things, however, we have menorrhagia instead of amenorrhœa, the remedy in question must, of course, be withheld in favor of some more suitable agent. Again, no treatment could be more satisfactory than the management by aloes of that form of constipation dependent upon weakness and diminished power of contractility of the large intestine. Especially does aloes become the proper agent, if to this condition be added a "bilious state." Practically such an association is frequent, and may be effectually remedied by laxative doses of aloes. It will be remembered that the researches of Rutherford and Vignal have demonstrated the power of aloes to stimulate the hepatic functions and to increase the flow of bile. Experience, it must be added, has confirmed this conclusion.

Another highly efficient agent in the management of habitual constipation, and one by no means sufficiently valued, is podophyllin. Unlike many, and indeed most, other drugs of its order, podophyllin may be used a long time without any diminution in its efficacy. It agrees exceedingly well with the stomach, and hence may be relied upon where constipation is associated with even the most trying forms of dyspepsia. It has no effect, either direct or indirect, upon the womb, hence it is well adapted to the costiveness of pregnancy. It may also be used with advantage during the treatment of the various uterine diseases, or even during the menstrual period, and it is the best remedy with which to treat the constipation of old people. As is well known, its effect is slow; a small quantity at bedtime will usually act by next morning, but may not until the day following. Notwithstanding its tardiness the desired result is sure. When constipation is found to persist in spite of other agents it will usually yield to podophyllin. Sometimes, however, its use must be continued indefinitely, and without our being able to note much good result after its suspension. Such examples are rare, however. After the bowels are regulated it need not be given more frequently than once every other day, as a rule. And occasionally it need only be repeated upon days in which there is no stool. It is best given in doses varying from ⅛ to ¼ grain, in pill, with Jamaica ginger, to which a little extract of cannabis indica may be added, as recommended by Habershon.

Now, the remedies above enumerated are, as is well known, not the only ones used in the treatment of chronic constipation, but they are those from whose use we have derived the best results. We do not pretend to say that every case will yield to their power, for we find instances that stubbornly resist every possible resource that may be brought to bear. In conclusion, it must be remembered that failure will be the inevitable result of treatment without the persistent and faithful coöperation of the patient. For it

is by habit upon the part of the person treated that the advantages gained by treatment may be retained. No obligation should be more imperative than the adoption of a regular hour for attending to the duties of the water-closet.

Hospital Reports.

THE COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC BY FESSENDEN NOTT OTIS, M.D.,
Clinical Professor of Venereal Diseases.

Reported for the Medical and Surgical Reporter.

Enlargement of the Prostate.

This patient, gentlemen, was sent here by a physician under whose charge he has been for some time. I know nothing about the case, except that the physician says he has something the matter with his urinary apparatus. We will have the patient give his own history.

He says he is sixty years of age, and that he has had trouble with his urinary apparatus for about five months. He never had venereal trouble; but three years before his present trouble began he sat on the steps, and, he thinks, took cold, and on attempting to urinate in the night he could not. In other words, he had retention of urine, and the doctor came and drew off his water on two different occasions, after which he had no trouble until the present.

Here, then, we have a starting point. A man sixty years of age, who, three years ago, took cold, as he says, and afterwards had suppression of urine, necessitating the use of the catheter. This suggests enlargement of the prostate, for which we will make an examination, and if we find that such a condition exists, we need go no further. This is a common history in men past fifty-five years of age, but rare at an earlier age.

Before making an examination you should fill your finger nails with soap, then oil them; then let the patient stiffen the knees, and bend the body at right angles on the pelvis, the best position for inserting the finger into the rectum. On doing so, in this case, I find immediately an enlarged prostate. The normal size of the prostate is about that of a horse chestnut, and the shape is similar thereto; but here the prostate is as large as a lemon, and it warrants me in the inference that it has produced an obstruction in the manner which I mentioned to you last week. Now, it is only by such an examination that you can determine with certainty that there is enlargement of the prostate, for other conditions simulate the same trouble. Observe, from this diagram, the condition which exists in this patient; here is the prostate, under the urethra, at the neck of the bladder, which, on becoming enlarged presses upon the urethra at this point, more or less occluding it, the occlusion being more nearly complete the more the patient strains when micturating, the urine beginning to dribble faster when he ceases to strain. Now, this patient's symptom, suppression of urine, came on suddenly, whereas, one might suppose the urine would begin to flow more and more slowly, and finally cease to flow altogether. But such is not the case with these patients. This man, you remember, first had temporary trouble with passing his water, which he says disappeared entirely for a long time, and even now he can pass a pretty good stream. Now, if there is one thing which a man is more likely to forget about than another, it is what he used to do in the way of urinating. The stream may gradually get smaller and smaller, and the patient get used to the fact, so that he supposes he passes about as large a stream as ever. He says he makes his water very well, meaning that it does not cause him pain, and that it does not take him a great while longer than it used to do. This patient says he does not think it takes him longer than it used to do, but that at one time it did, and it caused him pain. He does not think, however, that he makes his water now as freely as many people do. You see, he, too, is forgetful. If it do take such patients a little longer to urinate, they don't think it amounts to anything; it does not indicate any special trouble.

The reason why a sudden suppression occurs, as in this case, is, that the patient takes cold, is exposed to a sudden change of temperature, a congestion of the prostate takes place, just as of the head when we take cold there. Congestion, and consequently enlargement of the prostate thus takes place suddenly, sufficiently to close the urethra. It is liable to occur, however, from another and a common trouble, close in their neighborhood, namely, hemorrhoids. The prostate being sympathetic with the inflamed hemorrhoids, enlarges, and occludes the urethra and shuts off the urine. Old men having a slight attack of piles frequently find their water cut off, and they attribute it altogether to the piles, little suspecting that they have another more important trouble, one much more difficult to get rid of, namely, enlargement of the prostate. This patient has quite considerable enlargement of the prostate, and yet he does not complain at present of being troubled by it. How shall we explain that fact? In this way. The prostate, as you know, is composed of three lobes, the middle, and the two lateral. It is enlargement of the middle lobe that occludes the urethra by pressure; the lateral lobes may be enlarged quite considerably, and produce no inconvenience, except, perhaps, some trouble in defecation, and they are rarely enlarged to such an extent as to occasion difficulty in that respect.

Another point in the diagnosis in these cases is, to have the patient pass all the urine he can, then introduce the catheter into the bladder and see if any remains. Sometimes quite a large amount can be drawn off afterward. We get some here, which makes the diagnosis certain. This residual urine has quite a strong ammoniacal odor, indicating that it has been in the bladder for some time. (Observe that, as I withdraw the catheter, I compress the ends, so as to prevent dropping urine on the clothes of the patient and the bedding.) You will remember that I explained to you last week how enlargement of the prostate practically elongates the urethral canal; that the normal urethra measures about eight inches, and any measurement beyond that, in a case of prostatic enlargement, may be considered

due to elongation of the canal from such enlargement. Now, when a patient comes to you with retention of urine, it is a good plan to percuss over the bladder, and determine, if possible, about how much water is in the bladder; if there be a great deal it will be better not to draw off more than a pint, or a pint and a half, at one time; wait then a few hours, and withdraw more, and thus, little by little, gradually empty the bladder. When the bladder contains much urine its walls have been distended, and upon the withdrawal of all, its surfaces fall together, an irritation is set up, signs of an acute cystitis or inflammation of the bladder exist, which were not present before the withdrawal of the large amount of urine. That is an important point to bear in mind in a case of retention from prostatic enlargement. These patients frequently complain of too free a discharge of urine; they pass water frequently, and therefore think they pass too much, and they come to you for that symptom. If you be not careful you may make a mistake, and suppose the neck of the bladder to be paralyzed, and that the water consequently comes away as fast as secreted. But remember, when such a patient comes to you, that lack of power to retain the urine, in consequence of paralysis of the neck of the bladder, is a very rare condition, whereas a frequent desire to pass the water after retention, up to a certain point has been reached from prostatic enlargement, is quite common.

We treat this case simply by withdrawing the urine—the only means of much service in such cases. Various plans have been tried for reducing the size of the hypertrophied prostate, such as the direct introduction of ergot by the hypodermic needle, or other instrument, and the internal administration of different medicines, but I have yet to see an account of much encouragement. Patients have been operated upon, but no results have yet been obtained which would warrant the procedure. We are safe in saying to this patient that his only hope is in palliation; to withdraw his urine with the catheter at least twice a day. It is better to teach the patient how to pass the catheter himself, as it is often inconvenient, if not impossible, for him to come to your office, and he can do it with safety by using the soft rubber catheter, "Nélaton's."

Serious accidents may take place if the urine be not withdrawn sufficiently often. I have already referred to incontinence of urine from over-distention. Again, retention may, by reflex influence upon the kidneys, prevent secretion of the urine. I cannot illustrate the importance of this question better than by speaking of a case which came under my observation four or five years ago. It occurred in a very prominent merchant of this city, and, by the way, he was, to his cost, no friend to doctors, and with very great reluctance would accept any assistance from them. He had hemorrhoids, and was urged, on several occasions, to have something done for them, but he declined, saying that he found it best to attend to such matters himself. He also had to micturate quite frequently. But that, he thought, was of no consequence. His sons were somewhat anxious about it, and advised him to seek assistance; but no, it was all right, he knew what to do, how to attend to such matters. He went away for a few weeks, with his son, fishing, at a distance of a few hundred miles from home. He was about to take a vessel for the salmon stream, when he became troubled with his hemorrhoids, and at the same time found some difficulty in making urine. The difficulty increased. He was urged strongly to see a physician, particularly because they were going several hundred miles from any possible medical aid. But the old gentleman was too stubborn; he knew better what was the matter with himself than anybody else, and refused to consult a physician. They started. Within a very short time he was unable to make water; retention continued and led to incontinence, of which I have spoken. They, of course, returned as soon as possible, but before any surgical aid could be obtained he passed into a moribund condition, and died. His symptoms were those of uræmic poisoning. It was evident that reflex action upon the kidneys had caused them to cease secreting the urine, which was retained in the system and caused his death. His body was brought to the city, and I was called in as one of the examiners at the post-mortem, to see if there was anything wrong with the genital apparatus, for since he had been passing urine, due, as before said, to over-distention, they thought death might have been due to trouble having its seat somewhere else. The man was sixty years old, healthy looking, as if his lease on life and health should be prolonged many years. The prostate was enlarged, and it was perfectly evident that the hemorrhoidal inflammation had caused swelling of the prostate, which, in turn, caused pressure upon the urethra, retention of urine and death. Had that man carried with him a little instrument like this (a catheter), and made use of it, he might be alive to-day. It is important, therefore, when a man at that age has to micturate frequently, to inquire thoroughly into his condition, and then teach him how to use a catheter, that his bladder may be completely emptied at least twice a day. In some cases, moreover, it is important to wash out the bladder. In the case of this patient, the urine is pretty clear; still, there is some "muddiness" about it, the result of a catarrhal condition caused by the irritation of the retained urine. Now, we must get rid of this, and the patient will then only have the trouble of withdrawing his urine morning and night, being really as healthy as anybody, and having a chance to live to a good old age. He tells me he desires to pass water during the night. If he will draw it off with the catheter on going to bed, it is probable he will sleep well till morning. It may become necessary to wash out the bladder with some warm water after drawing off the urine, a process which he will also have to be taught to do himself. The most convenient instrument for this purpose is a bag syringe, made of india rubber, having a nozzle to fit on to the catheter, and a stop cock at this point. It may contain from four to six ounces; four ounces is quite large enough for this purpose. Warm, clean water should be injected, and lest some foreign substance should be injected into the bladder, and do harm, the patient should carry a strainer with him, and always strain the water before inject-

ing. A man who has attained to sixty years of age cannot usually see well, and is in danger of injecting into the bladder an object of considerable size, which may be floating about in the water, and become a nucleus for stone. I presented a specimen of stone to the Pathological Society, last year, which had for its nucleus a piece of broomstraw, about half an inch long, which had entered the bladder with fluid with which it was being washed out. Sir Henry Thompson recommends, for washing out the bladder, a preparation of borax, glycerine, and water. I think he takes about one ounce each of borax and glycerine, and two of water, and makes a mixture; and of this he puts about one or two teaspoonfuls into four ounces of water, which gives a solution of borax not sufficiently concentrated to cause any irritation, but sufficiently concentrated to disinfect it, and relieve the catarrhal condition. It is one of the best kinds of medication for such cases that I know of.

This patient says he now feels pain, and that there is pain in the head of the penis when he urinates; that in certain sitting postures he has pain, more especially when sitting on a hollow-bottomed chair; not so much when sitting on a flat-bottomed chair. Perhaps the prostate is more directly pressed upon while sitting in a hollow-bottomed chair. Pain in the head of the penis, or along its extent, during urination, is a sign of stone in the bladder; yet an inflammation about the prostate will not infrequently cause pain in the head of the penis, simulating that symptom in stone very closely. It is possible, too, that this man has stone in the bladder. We would not be justified in exploring it thoroughly with the sound, having just withdrawn his urine, without injecting warm water. Even though we did not succeed in finding one, we could not say positively that stone did not exist. He should be examined in different postures, and, if necessary, at different times, for stone sometimes lodges in such a position within the bladder, or becomes so sacculated, that it may be impossible to discover it until by some means it becomes dislodged. We have no more time to devote to this subject to-day.

Stricture and Gleet.

Our next patient, gentlemen, tells us that he is forty years of age, and that he is troubled with a discharge from the penis, which has existed for twenty years. He had his first gonorrhœa as early as his eighteenth year, and has had it several times since. He has never been entirely free from the effects of the gonorrhœa; has always had a little "oozing." He has no difficulty in passing his water.

This history is at once suggestive of stricture. A persistent gleet, extending over a series of years, the discharge never having fully ceased after its commencement. With such a history we may at once take for granted that there is a mechanical obstruction to urination, to begin with; that there is a stricture, which is usually situated at the orifice of the urethra. Whenever a case of gonorrhœa does not get well promptly, say within six or eight weeks, you should look carefully for obstruction at the orifice.

This patient's penis measures three inches and three-quarters in circumference; the size of the urethral canal at the bulbous portion is represented by 40, and turning the instrument down to 38, which corresponds with the circumference of the penis, I gradually withdraw it, and find a contraction about two inches and a half from the orifice, of eight millimeters, the size here being represented by 30. Now, there is a little further back a natural contraction; that is, at the point where the penis is flexed, hanging down, there are some wrinkles in the urethra, and at that point a very slight contraction, a stricture, if you wish to so call it, very commonly exists, and perhaps is caused by some of the solid portions of the urine being held in those wrinkles, leading to a thickening of tissue. We, therefore, expect a slight narrowing at that point, but no such cause exists for narrowing at two and a half inches back, as in this case. It is altogether likely that this very considerable stricture, eight millimeters, is the cause of his gleet, and of its long continuance. There is also some contraction here at the orifice, at a point where contraction is likely to be a prominent source of irritation. These strictures should be divided, but as the patient is not prepared to have the operation done to-day, we shall have to postpone it to a future time.

I will now divide a stricture in a patient who was at our clinic last week. The stricture is situated about two and a half inches back of the orifice. Passing in the urethrotome, we turn it up so that the blade, on withdrawing it, will divide the stricture, which corresponds to 25, up to 35, the normal size of his urethra, as compared with the circumference of the penis, three and a half inches. You have seen this operation done before, and I will not, therefore, describe the instrument and its management to-day. Regarding the after care, none is required, except to guard against the possibility of hemorrhage, which, when the stricture is situated anterior to the bulbo-membranous junction, is not at all likely to occur after the first gush of blood. To be on the safe side, however, an attendant should remain with the patient forty-eight hours after the operation, so that in case any bleeding should occur, the patient may not become demoralized, but have a towel or something tied around the penis at once, and stop it. Should there be any difficulty in checking it, a smooth instrument may be passed down the urethra, and then tie a bandage around it. As said before, nearly all strictures occur anterior to the bulbo-membranous junction; but when you have to cut down to this, there is danger of troublesome hemorrhage, and it is best to operate externally, performing external urethrotomy instead of internal. I have not lost a patient from hemorrhage after the operation of urethrotomy, under any circumstances, but my experience in two or three cases, in which the deep urethra was divided, has taught me to be very careful; in one case the patient very nearly lost his life. To prevent too much smarting, which occurs during urination immediately after the operation, the urine may be drawn off at first with the catheter.

—The International Medical Congress has applied for more funds, and is charged with extravagance.

ST. LOUIS HOSPITAL, PARIS.

SERVICE OF M. FOURNIER.

Reported by M. J. Halloran, M.D., for the Medical and Surgical Reporter.

Malignant Syphilis.

In the spring of 1879, a young man, aged twenty-three, entered the service of M. Fournier. He had contracted syphilis when eighteen years of age; the initial chancre was followed by buccal ulcerations; shortly afterward ulcers appeared over the tibia, on the forehead, etc., which left deep and indelible cicatrices. A cicatrix just over the inferior maxillary bone is particularly noticeable. Eight months after the appearance of the initial chancre an ulceration appeared on the soft palate, which caused its complete destruction, the osseous portion alone being left intact. At present there exists a large opening between the buccal and nasal cavities, and the food, particularly the liquid portion, was at first rejected through the nostril, but he has become habituated to this condition, and can, at present, swallow liquids with great facility.

He entered the hospital with hydrarthrosis of the left knee; the articulation contains a considerable quantity of liquid, but there is no pain; this is the second time he has been thus affected; on the previous occasion he was cured by iodide of potash.

An antisyphilitic treatment, red iodide of mercury with iodide of potash was administered, and he improved gradually, being able soon to walk about; there remained, however, considerable hyperostosis of the articular ends of the bones forming the knee joint.

Chancre of the Tonsil.

This was a case of indurated chancre of the tonsil followed by engorgement of the cervical glands and secondary eruption on the skin. The primary chancre was evidently induced by simple cauterization with a stick of nitrate of silver which had been previously used on a chancre.

In a similar manner M. Blanchet, who had a large practice in Paris, communicated syphilis to twenty-seven persons, in passing a catheter into the Eustachian tube; among others a young girl of high connections, a pupil at Sacre Cœur, was infected and, together with other symptoms, suffered from necrosis of the bones of the nose, but recovered good health subsequently. Blanchet had the habit of simply placing the catheter in a tumbler of water after each catherization, without otherwise cleansing it.

Enormous Phagedenic Syphilide.

A woman thirty years of age entered the service; she had been exposed to infection one year previously, and latterly had been employed at very laborious work.

First there appeared a small pimple on the gluteal region, to which she paid no attention; it soon increased in dimensions, and ulceration supervening, it finally became very large.

There is at present, in the left gluteal region, a deep and inflamed ulceration, about six inches long by five in width, and more than an inch in depth in the centre, the subcutaneous cellular tissue being invaded. The surface of the ulceration is grayish, a species of soft eschar being formed; the odor exhaled resembles that from tissues in a state of gangrene, but the pain is not very marked; a few papulo-erosive syphilides were found at the vulva.

The treatment prescribed was very simple; the eschars were removed by poulticing; the sore was frequently washed with Labarraque's solution, after which iodoform in fine powder was applied over the surface; oxide of zinc in powder was dusted on the vulvar syphilides; internally, red iodide of mercury, in pill.

Amelioration was exceedingly rapid, and complete cicatrization of the ulcer obtained without change of treatment.

Muscular Atrophy, of Syphilitic Origin.

An individual entered the service for considerable atrophy of the muscles of the left arm; in a short time complete hemianæsthesia of the same side supervened, and finally he became paraplegic. There was also complete paralysis of the third pair of cranial nerves, which is very frequently of syphilitic origin.

As there were syphilitic antecedents, iodide of potash in large doses (six to eight grams per diem) was administered, and with the very best results, for the patient recovered the use of his limbs, and the muscles are gradually becoming reconstituted.

In commenting on this case, M. Fournier mentioned a similar one, which had occurred in his own private practice.

The patient, a lady of very respectable family, had contracted syphilis ten years previously, from her husband; the nature of her malady was carefully hidden from her, and no treatment instituted. The muscular atrophy commenced in one arm, and gradually and progressively became more marked; there was no pain, and all the muscles of the arm seemed affected, equally affected; the atrophy did not commence in any one muscle, or group of muscles, as in progressive muscular atrophy.

A vigorous anti-syphilitic treatment was instituted, with mercurial frictions, and with an entirely successful result; she was completely cured.

Medical Societies.

COLLEGE OF PHYSICIANS, PHILA.

At the regular meeting in June a paper was read by Dr. George Hamilton, on

Vivisection, with Reference to its Restriction by Legislative Action.

He began by observing that this subject is one that not only interests the profession, but has also engaged the attention of many of the more cultured and sympathizing minds in the community. Popular feeling, it is true, has not been so decided in this country as abroad, notably in England; and this may, perhaps, be explained by the fact that vivisection in the United States has hitherto been practiced only to a limited extent. If the importance of this subject may be estimated by the earnest, vehement language urged in defence of vivisection, or in rebuke and denunciation of it, then may it well be regarded

as entitled to no second place in questions pertaining to medical practice. But the subject is, intrinsically, a serious one, whether in reference to the human or the brute creation, and demands, for profitable consideration, that it be entered upon in a liberal, ingenuous and forbearing spirit.

The speaker disavowed any disposition to undervalue that which vivisection has accomplished to illustrate physiology; neither did he deny that, in certain affections, generally of the nervous system, great benefit has accrued to medical practice, originating directly or indirectly, it matters not, in the experiments of vivisectionists. But he called attention to certain drawbacks to its usefulness. The observer generally does not begin his operations until the animal is thrown into an unnatural condition, by the use of agents that destroy nerve power and sensibility to such an extent as to render it in a measure lifeless; or, if these agents are not employed, the animal is thrown into violent excitement and terror, from the torment inflicted by the knife, the chisel, the mallet, or the red-hot iron of the operator.

A serious objection to accepting, as applicable to the human species, the results of experiments upon animals, is evident in the constitutional diversity and dissimilarity between them, the food of one animal proving poisonous and fatal to another. This obvious and important fact, that neither quibble nor logic can refute, is apt to be overlooked or disregarded in experiments. Very naturally, the investigations of the physiologist are directed almost exclusively to the functions of the brain, the spinal marrow, and the general nervous system; for here, in fact, resides the motive power of the entire organism, just as we see that the movements of the steam-engine are due to the furnace and boiler. Unfortunately for successful experiments upon animals, the nervous system is so exquisitely sensitive, and every portion, from the huge brain to the minutest ramification in the capillary system, so intimately connected and correlated, as to maintain a sympathy so universally perfect and surprising in its power, that we may well exclaim, "How fearfully and wonderfully are we made!" The vivisectionist then, *ab initio*, finds himself in difficulty; for violence to one organ will generally throw into commotion other portions of the organism, and this, in turn, may extend, so as to involve every part.

The mere want of success in attempts to reveal the mysteries of vital movement is in itself not ground for blame; the difficulty lies in the intractable character of these studies. Of this no one seems to have been more convinced than Bernard. He, in fact, candidly avowed that, in regard to secretion, the entire subject needed revision. This admission, by one so skillful, experienced, and renowned in vivisection, was of the utmost importance, for no one better than he knew the necessity for an infinite amount of knowledge, beyond what is now possessed, of vital organization and action, before the mysteries of nutrition, secretion and assimilation could be evolved from the darkness in which they had ever been shrouded, so that some ground of hope might with reason be entertained, that the long expected day of a rational therapeusis was about to dawn upon us, and gladden our vision with its life-inspiring beams. Other experimenters have, from time to time, admitted that vivisection had done more to advance physiology than it had ever contributed to improve general medical practice. The nature of a disease being once determined by vivisection, we are, it is sometimes said, in a position to attempt its cure. This is by no means certain; for all experience shows that some of the maladies which occur most frequently, and which afford the fullest opportunities for, and have repeatedly undergone, thorough examination, are among the most incurable and fatal; so that all that can be claimed in such cases is, that we are in better position to attempt their treatment.

Objections to vivisection have been made, in reference to its alleged immoral character. The sensibility and finer instincts of man, it is asserted, are endangered by frequently witnessing bloody and painful operations upon animals. That the tendency is in this direction, no argument is necessary to prove, for it finds its correlative in the case of vice; seen but once—hated; seen too often—embraced. Too much stress, however, may not be laid upon this charge, otherwise the surgeon, in particular, might be embarrassed or thwarted in his well-directed and merciful efforts for the relief of suffering, or for the reparation of injury. Nevertheless, man, as the lord of creation, is morally bound in regard to the animals under his control; for we are given to know, from Scripture, that the merciful shall obtain mercy, and that the merciful man is merciful to his beast.

The statement has recently been made, that vivisection is practiced perhaps more frequently in Pennsylvania than in any other part of the country. When we reflect upon the activity and energy of medical thought in the Northeastern and some of the Western States, it seems almost incredible that such indifference to this practice could exist, unless from incredulity as to its importance in medicine.

In concluding, the speaker said:—

From the general tenor of this paper, it might be thought that strict consistency with the sentiments therein expressed would scarcely justify an approval of vivisection, even when the normal physiological status of the animal had been destroyed previously to operation, or when its practice was by law restricted by the most rigid enactments; but that it should be unconditionally prohibited. The entire subject, however, is yet *sub judice;* and this, if no other reason existed, would warrant, for a time at least, something in the form of concession, both to the vivisector and to the public. The restrictions placed on vivisection by the Parliament of England are, so far as we have been informed, greatly approved by the more intelligent and thoughtful portion of the people. This action of the government had in its support, among many others, the following: Cardinal Manning, Prince Lucien Bonaparte, Alfred Tennyson, Robert Browning, James Anthony Froude, and John Ruskin; the head masters of Rugby, Harrow, and seven other large schools; twenty-one physicians and surgeons; and thirty-seven peers, bishops, and members of Parliament. These distinguished men, with many

others of similar sentiments, possessing as they did, in position and wealth, the means of enjoying life in an eminent degree, would have abstained from opposing the practice of vivisection, if they had believed that health and longevity would have thus been rendered more secure. Yet they felt that, under doubts in regard to a precise estimate of the value of vivisection to mankind, the voice of mercy cried aloud, from the horrors of Alfort and elsewhere: and the nobler instincts of humanity, and the precepts of Christianity, taught them not to disregard the doleful and imploring appeal. In our own country, New York, and, if I am rightly informed, several other States, have enacted stringent laws in regard to vivisection. In our own State, in which is the city of brotherly love—founded by Penn, in an observance of the principles of justice, peace, benevolence, love, and mercy, to a degree that the world has seldom witnessed—we are yet without this merciful enactment. Does it not seem eminently proper that the State of Pennsylvania, founded by that man whose humanity and practical Christianity will never disappear from the page of history, and whose figure will, ere long, crown the summit of his monument, the most magnificent of our country, should no longer delay the passage of an act in consonance with the benign and merciful character of its noble and illustrious founder!

After the reading of the preceding paper, Dr. J. C. Morris said:—

I regret that my late arrival has prevented my hearing the whole of Dr. Hamilton's interesting and important paper, and also regret finding myself obliged to enter a protest, feeble though it may be, against the acceptance of one of his statements. That vivisection necessarily tends to harden the feelings of those who practice or witness it, to render them callous to the sufferings of the poor victims, is contrary to my own experience. I shall never forget the expression which passed over the face of one of the most distinguished living physiologists and extensive vivisectors, as he remarked, "I am ashamed to look a rabbit in the face." My own experience as a young man was similar. And yet no one can question for a moment the advantage to be gained, even by the repetition before young men of the old and well-known experiments which reproduce before our eyes the sufferings due to various conditions of disease which we have to treat, thus giving to these young men the advantage of that experience which those of us who are older have gained as we have watched by our patients, on their journey to the bourne whence no traveler returns.

Besides, the same argument as to the witnessing of extensive and bloody operations rendering men callous to suffering, would apply with even more force to practitioners of surgery. Yet who has not seen the shrinking of older surgeons from such operations, which grows with their years and experience? And I need scarcely remind you, sir, of that distinguished surgeon, the late Dr. Physick, who, in his later years, had to be watched during the interval between an operation's being decided upon and the time fixed for its performance, to prevent his absenting himself from the city.

No, sir, the thing which impels the vivisector, as that which impels the surgeon, is the desire to be able better to relieve human suffering. Let us be careful how we discourage either.

Editorial Department.

Periscope.

Effects of Syphilis on Herpetic Patients.

The March number of the *Journal des Sci. Med.* states that M. Révillet (of Lyons) has devoted his thesis to studying the effects of syphilis on herpetic subjects, this question being as yet unsettled, notwithstanding the attention it has received. The author first studies those cases in which syphilis shows itself upon patients already affected with herpes, and his observations establish the following fact: The cutaneous affection receives no impetus at the time the secondary symptoms show themselves; on the contrary, it has a tendency to spontaneously disappear, or else it loses its peculiar characteristics, and is transformed into a syphilide; through a series of successive modifications, the place occupied by the herpetic psoriasis, is now invaded by a real papulous syphilide, in which the traces alone recall the pre-existent psoriasis; but this transformation is anything but final; herpes, the pre-existent cutaneous affection, soon again reappears, with the same characteristics it possessed prior to the syphilitic invasion. This last fact proves how defective was the method recommended by those who, with Anzias-Turenne and Gibert, tried to syphilize patients for the purpose of modifying or curing chronic affections of the skin, especially as when herpes is present syphilis finds a favorable ground for the development of its most serious forms.

Another series of observations mentioned by M. Révillet, shows that a syphilide may be changed, *in situ*, into a psoriasis; this transformation first occurs in the localities most generally visited by the psoriasis, that is, on the posterior face of the elbows and the anterior face of the knees and thighs; these lesions actually belong to the real psoriasis, and there is nothing about them of a syphilitic appearance. We must, therefore, admit that in those cases herpes has been aroused by syphilis; but this awakening of the herpetic diathesis may also take place at a much later period, and it would appear from statistics that syphilis either acts hastily or slowly in causing the appearance of a psoriasis of an herpetic nature. This fact, moreover, corresponds with the opinion of several authors. M. Révillet recalls that Bazin, and Ricord have said

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that: syphilis awakens herpes, and M. G. de Mussy, observes that, "pox is a dunghill which favors the ripening of every diathesic germ." Finally, all these facts seem to warrant the conclusion that in herpetic patients syphilis meets with favorable conditions for its most serious manifestations and rapid development, and the exhibition of tertiary symptoms; syphilis is then indeed serious—not only because of the lesions to which it gives rise in the external integuments, but because of the changes it causes in the bones, and parenchymæ, and which constitute the disease when it has reached its third period.

The Proper Treatment of Inebriates.

In a lecture reported in the *Medical Press and Circular*, June 8th, Mr. Stephen S. Alford, F.R.C.S., gives the following directions on this subject:—

As soon as an inebriate is received into such a home, and until the alcoholic effects have passed off, he should be kept in bed, under medical treatment. All alcoholic drinks should be at once withheld; no harm will result from this total and sudden suspension of stimulants, not even in delirium tremens. The letting-down system, by gradually discontinuing alcohol, is unwise, as it feeds the craving, and hinders the recovery. The morbid craving will soon abate. but to relieve the intolerable sinking and nervous prostration, acidulated drinks, barley water, buttermilk, and such like diluents should be freely given for a few days; even if sickness occurs, these drinks should be persevered with, for the sickness helps to cleanse the stomach. These drinks also act freely on the skin and kidneys, and thus have a beneficial effect on the secretions. Russian vapor baths, if they can be obtained, will promote this, and tend to soothe and allay the distressing restlessness, and to divert and occupy the attention. After a few days a little light food can be given, such as toast, with beef tea, or some farinaceous preparation, but butcher's meat should, for a time, be avoided.

It would, perhaps, be better for confirmed inebriates, at all times, to take butchers' meat moderately, since it taxes the stomach, and creates a sinking feeling. Liebig considers that vegetarians, from chemical and physiological causes, would necessarily dislike and avoid alcohol.

During the early stage of treatment, if accompanied by wakefulness and delusions, bromide of potassium, in large doses, with capsicum, frequently repeated, has a beneficial effect. The bromide soothes the agitated nervous system, and the capsicum allays the gastric craving. The ordinary anodynes, especially chloral hydrate, should be avoided. As soon as the alcoholic contamination has passed off, which it will require fully three or four weeks to effect, exercise and light occupation will be beneficial, and then the general moral treatment must be brought to bear. Harshness will cause sullenness and obstinacy, and, therefore, kindness and sympathy must be shown, and an effort made to arouse the better feelings, create a desire for recovery, and inspire a confidence that they can be restored if they will exert themselves, and second the efforts made on their behalf. The better part of the man being thus aroused, the alcoholic contamination eradicated, and the nervous system rallied, the influence of restored inmates, with whom they should now be allowed to associate, will be useful, helping to confirm a determination to throw off the old habits. Under judicious management and religious influence this improved condition may become permanent; in most cases nine or twelve months—in confirmed cases even some years—may be required to strengthen and confirm these habits. By degrees full liberty can be allowed the patients to go about as they like, at first only in company with a tried inmate, but on parole as regards alcoholic drinks. The habit of self-denial under temptation is thus practiced, and becomes confirmed; and so valuable lives may be restored to their families and to society. Such I believe to be the most successful plan for the treatment of the inebriate.

To carry this out, it is absolutely necessary to have sufficient power of restraint during a paroxysm, as well as from the first, so as to put the inebriate under control, voluntarily or otherwise. No one will be more thankful afterward for this suspension of their mad career.

During convalescence red cinchona bark strengthens and sustains nerve power; but when attacks of exhaustion and sinking arise, caffeine or cocoa will afford temporary relief; various nerve tonics, as quinine, arsenic and strychnine, may also be given with benefit. The preparations of iron are not adapted for these cases except where there is anæmia. To prevent relapses, a life-long abstinence from alcohol is absolutely necessary.

The Removal of Nasal Polypi.

At the conclusion of a report of various cases in illustration, Mr. Henry Morris remarks, in the London *Medical Times and Gazette*:—

Naso-pharyngeal growths can be removed by one or other of six different methods, viz: 1. Simply by the nasal forceps used through the anterior nares. 2. By the wire écraseur used through the nose, even when the tumor is too large to be drawn out through the nostril in the noose of the instrument. 3. By seizing the polypus at the back of the palate and twisting it off with a pair of tongue-forceps, or with the fingers and thumb in the mouth. 4. After slitting up the lip and the ala of the nose and enlarging the anterior aperture of the nostril by clipping away the margin of the nasal process of the superior maxilla. 5. By the method employed by Syme in 1841, and by Flaubert and Professor Mott in 1842, of laying open the nose by an incision from the angle of the orbit, round the wing of the nose, and through the mid-line of the lip, and then dividing the suture between the nasal bone and the nasal process of the superior maxilla, and turning the nasal bone, with the integuments covering it, toward the median line. 6. By excision of the whole or great part of the upper jaw. It is impossible and would be unwise to advance arguments in

favor of this or that operation in preference to the others; but I believe, by one of the above methods, all cases of naso-pharyngeal polypi can be dealt with more efficiently than by having recourse to the practice of the permanent ligature, or of dividing the soft palate, or of splitting the nose along one side of the median line. All these three measures have had their advocates; yet the permanent ligature is fraught with the danger of setting up blood-poisoning, besides being a source of prolonged inconvenience and even disgust to the patient; and division of the soft palate, or of the nose along its median line, has the great disadvantage of failing in its chief object, viz: in affording sufficient increase of room to be of the least advantage, and in this respect, if we may compare small things with great, it is about on a par with the Sigaultean operation as a substitute for craniotomy or Cæsarean section. These measures excepted, it will be well, in naso-pharyngeal polypi, as in operations on the tongue, to vary the plan of procedure to suit the conditions and necessities of each case, and not to adopt any particular method as being the best for all cases. The operation which promises to allow of the most complete removal, but which at the same time, least interferes with the surrounding normal parts, is the one which should be selected. Just as in cases of cancer of the tongue, the mode of operating ought to be decided upon *only* after regarding the extent of the disease, together with the size of the aperture of the mouth, and the space afforded by the size or absence of the biscuspid and molar teeth. To do too much because of some prejudice in favor of a given operation is unjustifiable; to do too little for the same or other reasons, is to sacrifice the interest of the patient.

Treatment of Vomiting in Phthisical Patients.

M. Ferrand, physician to the Hospital Lænnec, sums up as follows, in *L'Union Médicale*, quoted in the London *Medical Record*, the principal indications presented in the vomiting of consumptive patients. The forms of vomiting are:— 1. The mechanical vomiting resulting from the excitation of the respiratory nerves, which is sometimes combined with a certain degree of pharyngeal or gastric irritation. 2. Gastric vomiting, properly so-called; central and bulbar vomiting. These varieties of vomiting differ, not only in their mechanism, but also in their period of appearance, and in the nature of the vomited matters, etc. The mechanical vomiting of phthisical persons, which may be called direct vomiting, occurs at the outset of the disease. It brings up substances which are in a large measure alimentary. The first indication in this case is to calm the cough. This, however, is more easily said than done. Emollients, alkaline and soothing gargles should be employed. When the irritation of the pharynx is deep seated, modifying astringents (alum, tannin, confection of roses, etc.) should be resorted to, and even such remedies as tincture of iodine, nitrate of silver, or ammonia. What are most often employed are the narcotics, the fumes of belladonna, datura, and then anæsthetics and antispasmodics. In this contingency, M. Woillez, recommends touching the pharynx with a solution containing one-sixth of bromide of potassium. Gastric vomiting is the most common of digestive disorders in phthisis. It occurs in three-fifths of patients, according to Andral, and in four-fifths, according to Louis. It is the vomiting of the middle period of the disease. The matters are not purely alimentary; they are substances more or less changed by the digestion and fluid. They include also mucus and bile. There are four varieties of gastric vomiting. 1. Vomiting from apepsia. For this, bitter and tonic digestives are to be employed, or, in case of need, an emetic; in default of the latter, chloral, and chloroform in preference to ether; and diastase, because of its peptic qualities, may render real service in these cases. 2. Vomiting from "hypercrinia," observed especially in cachectic patients, is combated by absorbents (magnesia, charcoal), or astringent powders (rhatany, calumba). Powdered opium renders great service in these conditions. 3. The vomiting from convulsive gastralgia demands the administration of narcotics (opium, chloral, ether). The application of ether spray to the epigastric region and the back has given good results. 4. Vomiting by gastric irritation. Here the diet must be regulated, the meals must be given at fixed times, and milk-diet prescribed. Alkaline remedies and iodide of potassium in small doses should be given. Opiate blisters should be applied, and, in case of failure, revulsive agents (tincture of iodine and blisters) should be used without fear. Central or bulbar vomiting may occur at the outset of the tuberculosis, but usually at an advanced stage. It may be symptomatic of an encephalic irritation, or the effect of bulbar anæmia. The vomited matters consist mostly of mucus and bile. The therapeutic agents at the disposal of the physician are first chloral, then chloroform, opium, and morphia, as well as bromide of potassium, in doses of one to two grams (fifteen to thirty grains) at meal times.

Reviews and Book Notices.

BOOK NOTICES.

Supplement to Ziemssen's Cyclopædia of the Practice of Medicine. Edited by George L. Peabody, M.D., Instructor in Pathology and Practice of Medicine, College of Physicians and Surgeons, New York, etc., etc. New York: William Wood and Company; 27 Great Jones street. 1881. Sheep, 8vo. pp. 844.

This volume comprises a series of brief articles, chiefly abstracts from recent contributions to medical literature, so arranged as to show the progress made in the various departments of medicine since the publication of the several volumes of this valuable work, some of which are now five or six years old. These articles, sixty in number, will be found to be of value, not only to those who possess the Cyclopædia, but as an independent work, showing the most recent

advances in medical science. Some of the subjects treated of in the Cyclopædia have been left out in this volume, as nothing of importance has since appeared in regard to them—most of the fevers, especially those that are contagious, are well represented. Under yellow fever we find a brief history of the several epidemics which have appeared in this country since 1873, with additional remarks on the prophylaxis, clinical history, pathology and treatment. In this connection, it is quite curious to notice that the epidemic of so-called "Typho Malarial Fever," which broke out in Baltimore, about the middle of September, 1876, attacking forty-four persons, of whom forty died, has been here classed as yellow fever. The chapter on syphilis is full of interesting matter, though there is nothing new in the way of treatment, the tayuya, as well as iodoform internally, having failed to give satisfaction, and the relief obtained at the various thermal springs in this country and Europe being entirely the result of vigorous medication by resident physicians at the springs. For want of space, we are unable to give this volume the full attention it merits. Suffice it to say, that the contributors are all men of well known ability, and seem to have spared no labor to render the work what it purports to be.

American Nervousness. Its Causes and Consequences. A Supplement to Nervous Exhaustion (Neurasthenia). By George M. Beard, A.M., M.D., Fellow of the New York Academy of Medicine, Member of the New York Neurological Society, and of the American Neurological Association, etc., etc. New York, G. P. Putnam's Sons, 27 and 29 West 23d street, 1881. Cloth. 12mo, pp. 352.

As chief among the causes of the rapid increase of nervousness, a modern disease of American birth, the author places modern civilization with its distinguishing characteristics, steam power, the periodical press, the telegraph, the sciences, and the mental activity of women, to which is added the influence of our excessively dry and changeable climate, of our civil and political, religious and social institutions, together with our personal habits and indulgence of appetites and passions, all of which combined tend to produce a rapid development and acceptance of new ideas, increase in amount of business and worry, necessity of punctuality, financial trouble, and innumerable anxieties of which our forefathers knew nothing. Nervousness, or nervelessness, as it might with propriety be called, is particularly a disease of brain workers, and its subjects may be recognized by a fine organization, distinguished from a coarse by fine, soft hair, delicate skin, nicely chiseled features, small bones, tapering extremities, and frequently by a muscular system comparatively small and feeble, associated with a superior intellect and a strong and active emotional nature. They have an increased capacity both for enjoyment and sorrow, are extremely sensitive to heat and cold, and subject to functional nervous disorders, but rather exempt from organic diseases of the nervous system and from inflammatory diseases. Nervousness does not, however, appear to be such a great evil, for it carries its own antidote with it, and the greatest average longevity is found among the classes where nervousness prevails, the injurious effects of the same being more than counterbalanced by their superior hygienic surroundings. It is in this way that we must try to explain an apparent contradiction found in the book, the author asserting in one place that nervousness is an American disease of modern origin and found chiefly among the brain-working classes, that it is rapidly increasing, and that one of its effects is a diminution in bodily weight; in proof of which he states that a thousand Americans taken at random weigh less than a thousand Englishmen or Germans of the same ages and social status; while in another part of the book he makes the statement that "we weigh more than our fathers," that "the women in all our great centres of population are yearly becoming more plump and more beautiful," that "in the leading brain-working occupations our men are acquiring robustness, amplitude and quantity of being," and that "a thousand girls and boys, a thousand men in the prime of years, taken by accident in any of our large cities, are heavier and more substantial than were the same number of the same age, and walk of life twenty-five years ago;" in short that during the very same period that the bodily weight-reducing nervousness, has been increasing, we have grown heavier. The physical future of the American nation he pictures as gradually approaching to perfection, though this has to be preceded by a period of marked increase in neurotic diseases, including inebriety. His remarks on education are especially worthy of careful study. In conclusion, we wish to say that we regard this work as far superior to any of the previous literary productions of the author, and, being written in a popular style, it should be read alike by the medical profession and the clergy, by parents and teachers, and by our women, who, in the author will find a warm admirer, several pages of the book being devoted to the "phenomenal" beauty of American women.

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THE PURIFICATION OF POLLUTED RIVER WATER.

A question of vast importance to public health is that in reference to the *modus operandi* of the purification of river water after sewage in considerable quantities and other decomposing organic substances have been thrown therein. Dr. TIDY, a well known English sanitary authority, teaches that this purification is effected *per se* by oxidation of the organic substances in the act of flowing through and amidst a large volume of water. He has shown that in some English rivers, the Wear, for example, the water is as pure some ten or fifteen miles below a city of 100,000 inhabitants, all of whose sewage it had received, as it is above the town.

Dr. FRANKLAND, also an eminent authority, disputes this view in a recent number of the *Journal of the Chemical Society*. He states that the great purifying agent is *iron*, and that a stream bearing in solution ferruginous compounds is the most effective disinfectant and antiseptic known in order to restore to purity the waters of contaminated rivers. Both his instances and the chemical reasoning he brings forward to support this view appear convincing, though it is certain that oxidation also plays a part in the system of natural purification.

The effect on impure water of a large number of the disinfectants ordinarily sold has been studied by Dr. TRIPE, who reported the results to the Society of Medical Officers of Health, last winter (*Medical Times and Gazette*, Dec. 4).

The results of the experiments by heat are important, as they show that the vibrios, bacilli, and, at any rate, some other bacteria of sewage, are killed by a temperature of 140° Fahr., while former experiments have shown that vaccine lymph has been rendered sterile after being exposed for two hours to a temperature of 150° Fahr., or for half an hour to a temperature of 170° Fahr., but that until these temperatures were reached and maintained for the periods mentioned the lymph still remained active. It is, therefore, probable that these bacteria, with perhaps one exception, are more influenced by heat than the infective particles of vaccine. The infusoria became more lively as the sewage warmed, but immediately the temperature exceeded 90° Fahr. their movements became slower, and at 110° all had died. At 120° Fahr. many of the bacilli, vibrios, and spirilla were motionless, and at 125° all these had ceased to move except a few spirilla.

Impure carbolic acid and preparations of zinc chloride were the most efficient in destroying the lower forms of life. It seems to be the case that the impure carbolic acid has a much greater germicide action than absolute phenol, a fact that, we believe, has not escaped the notice of some surgeons.

Unfortunately, none of the agents suggested could be employed in purifying sewage which flows into water destined for potable uses. At least, no practical method was suggested for this purpose. The matter is one of such widespread importance that its study has become indispensable to the protection of the health of large districts in and near cities.

A suggestion in this connection has been made

by Professor W. H. BREWER, of New Haven, in reference to the action of muddy water, containing clay, on sewage. He believes that muddy water and water containing sewage act in a mutually purifying manner upon each other. We find that the purer the water the longer it takes the last portion of suspended matter to fall to the bottom. This may be due to the saline mineral substances dissolved in the sewage, which hasten the precipitation of the suspended matter. Hence, sewage discharged into a river of muddy water would be more rapidly purified of its putrescible materials, namely, the albuminoids, than if it were discharged into a river of clearer water.

This would not necessarily extend to the removal of the specific germs of certain diseases, which we know can exist in water of great transparency, but of the dissolved and very finely suspended matter which gives rise to foul smells, and which, in chemical analysis, are taken as the measure of sanitary impurity.

The unpleasant odors which sometimes occur in city waters distributed from reservoirs, and which largely arise from the decay of aquatic vegetation, he has known several times to suddenly diminish, or entirely disappear, with the *roiling* of the water by a heavy rain; and other persons have made similar observations.

IS GONORRHŒAL INFLAMMATION OF A SPECIFIC NATURE?

This is a question on which sometimes the reputation of individuals and the happiness of families depend, and the possibility of its decision should be closely scanned. In the face of the positive assertions of some writers (TAIT, SIMMONS), it is worth while to quote the opposite opinion of that eminent authority, Prof. J. MATTHEWS DUNCAN, as expressed in one of his lectures:—

I have mentioned many forms of vaginitis, and one important practical subject I must discuss briefly in connection with the forms of this disease. Is it, in any special case, venereal or not venereal? You will, in practice, often be asked this question, and I advise you never to answer it explicitly. You cannot decide absolutely whether a case is venereal or not. At one time it was supposed that the discovery of trichomonads, or a leptothrix, or a vibrio, would decide whether it was venereal or not. But this is now given up. I have seen gonorrhœa which was certainly not venereal bear every character of the ordinary venereal disease. I do not say that there is no distinction, but only that the distinction cannot be made out by the practitioner so as to justify him, from his own inquiries into a case, in giving a decided opinion on the subject. Meantime, the distinctions of venereal gonorrhœa are simply marks of severity. It has been said that venereal gonorrhœa is infectious, while simple gonorrhœa is not; but I have seen every character that can be predicated of the one occur in the other, as I said before, including infection.

It is clear from this that the utmost caution ought to be used in pronouncing any case of vaginitis as of specific origin. In fact, is it not safer to go further than Prof. DUNCAN appears willing to advance, and to say at once that *there is no distinction* between gonorrhœal and ordinary vaginitis?

Such is the position taken by a London surgeon of vast experience, Mr. LANE, who for twenty-five years has been connected with the London Lock Hospital. In some testimony he recently gave before a Parliamentary Commission, he stated that, as the result of this exceptionally wide observation, he did not believe in the specific nature of gonorrhœa; the discharge was a result of the inflammation of a mucous membrane; and his view, like that of most of the French authorities, was, that both gonorrhœa and leucorrhœa were essentially the same; they were affections of the same mucous membrane, and both were communicable according to their character, whether they arose from impure intercourse or not. If they were purulent or yellow, they would excite a similar discharge in another person; but if transparent or only slightly milky in appearance, they would probably be innocuous. Vaginal discharges in prostitutes were, in this sense, more contagious, from the continual irritation to which their genital organs were subjected. In the male, a discharge, undistinguishable from gonorrhœa, might arise from the use of cantharides, the passage of a stone or of gravel along the urethra, or the use of a catheter; and this was also liable to give rise to the same sequelæ—such as swelled testicle, and even gonorrhœal rheumatism.

Dr. KEYES, in his late work on *Venereal Diseases*, while not going the full length of these opinions, evidently inclines strongly to doubt the specific nature of the gonorrhœal infection, and adduces many causes which can produce it, apart from contagious intercourse. Those who remember RICORD'S teachings will recall his short and easy recipe for acquiring gonorrhœa without exposure to one having specific or any other disease.

It would seem from these statements that the idea of the specific nature of gonorrhœal inflammation is so far from being demonstrated, that it is better to hold it as doubtful, and when an opinion is called for, to express the view that such specificity does not exist.

NOTES AND COMMENTS.

Therapeutic Notes.

TREATMENT OF CONSUMPTION.

In the *Medical Press and Circular*, June 8th, Dr. William H. Pearse says he is continually prescribing a combined muriatic acid, quinine, and arsenic treatment to a large number of those who are of the phthisical type, but whose cases have not advanced beyond the indigestion or bodily debility stages, and, with rare exceptions, with marked benefit. His general directions to such a patient are an out-of-door life, all and any food to which his fancies incline him, and which include onions and pickles; also cod-liver oil, and the following mixture three times a day, after meals:—

℞.	Cinchonid. sulph.,		gr. xx
	Acid muriat. dil.,		ʒ v
	Liq. arsen. hydro.,		♏c
	Aq. maris.,		♏lxxx
	Mangan. sulph.,		gr. xx
	Infus. quassiæ,	ad	℥ x.

Twenty doses.

The improvement is steady and regular, though, of course, rather slow.

TARTARIC ACID IN DIPHTHERIA.

Prof. Vidal, of Paris, employs the following in diphtheria, and claims for it an almost specific action:—

℞.	Tartaric acid,	℥ ijss	
	Glycerine,	℥ ss	
	Peppermint water,	ʒ vij.	M.

A brush dipped in this solution is made to touch, every three hours, the diphtheritic patches, which soon reduces them to a pulpy liquid mass, which is afterwards easily removed. In the interval of the applications of the tartaric acid the false membranes are touched with citron juice.

HYDROCHLORIC ACID IN CHLOROSIS.

Dr. Zander states, in *Virchow's Archiv*, that he has treated many cases of chlorosis with hydrochloric acid, with the best results. He claims that there is iron enough in the food, but that its absorption is deficient, owing to the want of hydrochloric acid in the gastric juice, by means of which iron is dissolved and made capable of being absorbed.

CHRONIC URTICARIA.

According to M. Labbé, *le Progrès Médical*, June 4th, in the treatment of this affection arseniate of soda must be administered in pretty large doses, five milligrams to one centigram per diem. At the same time lotions containing corrosive sublimate, such as the following:—

℞.	Hydrarg bichlorid.,	gr. xv	
	Aq. destill.,	℥ ij	ʒ ij 100 grams
	Alcohol,	q. s.	M.

For adults, a teaspoonful of this solution should be added to half a tumbler of fresh water, and this should be used to bathe the affected parts when there is considerable irritation. After fifteen days of treatment there is almost complete cure. Again, at each meal the patient should take a teaspoonful of the following solution:—

℞.	Sodii arseniat.,	5 centigrams
	Aquæ destill.,	100 or 150 grams. M.

In conjunction with this treatment, alkaline baths and alkaline drinks should be taken, and prolonged bathing, after Hebra's method, may be tried. The parts affected may be dusted with a powder composed of oxide of zinc and starch.

The Proper Way to Give Aconite.

In the London *Medical Record*, Dr. William Murrell makes some judicious observations on the correct plan for administering aconite so as to secure its most advantageous action. He observes that aconite does act best in small doses frequently repeated. Many practitioners get no good from aconite, because they do not know how to use it. The dose of the tincture recommended in the *British Pharmacopœia*—from 5 to 15 minims—is absurdly large, and no one with any respect for his patient's safety or his own reputation would ever think of giving it. The best way is to put half a drachm of the tincture in a four-ounce bottle of water, and to tell the patient to take a teaspoonful of this every ten minutes for the first hour, and after this hourly for some hours. Even smaller doses may be given in the case of children. The great indication for the use of aconite is ele-

vation of temperature; the clinical thermometer and aconite bottle should go hand in-hand. If properly used, aconite is one of the most valuable and indispensable drugs in the *Pharmacopœia*.

Treatment of Acute Eczema.

M. Fournier employs the following treatment during the period of desquamation after all inflammatory congestion of the skin has disappeared. When desquamation continues indefinitely the ointments which would be detestable during the inflammatory period are of great service, if not of too exciting a nature. Those most usually employed are the following:—

℞. Benzoin, 2 grams
Zinci oxid, 2 grams
Ung. simplicis, 20 grams. M.

Or, the glycerite with tartaric acid, much employed by M. Vidal:—

℞. Ac. tartaric., 1 gram
Glycerite amyli, 20 grams. M.

If these do not succeed recourse may be had to others which are slightly irritant, containing small proportions of tar—

℞. Picis (tar), 2 grams
Glycerit. amyli, 30 grams. M.

Or. containing oil of cade:—

℞. Ol. cadini, 2 to 4 grams
Ol. amygdal. dulc., 30 grams. M.

In conjunction with this, the parts affected should be bathed with slightly astringent lotions. As, for instance, the following:—

℞. Sodæ borat., 30 grams
Glycerinæ, 60 grams
Aquæ, 300 grams. M.

Two or three lotions per diem; the parts being then dusted with starch.

Management of Chloroform Narcosis.

A Paris correspondent of an English contemporary relates the following incident:—

I was invited by Dr. Labbé to assist in a case of ovariotomy at a private hospital. The patient was given chloroform. When the anæsthesia was complete, the surgeon made his incision in the linea alba, through the skin and circular tissue. Suddenly the respiration stopped, and the heart ceased to beat, as clearly shown by the cessation of bleeding and the bloodless appearance of the lips of the wound. The mouth was cleansed from mucus, the tongue drawn forward, the patient's head thrown well back, and artificial respiration was practiced for quite ten minutes, but without result. The case appeared desperate, when Dr. Labbé put a large cloth in boiling water and applied it to the cardiac region. Instantly the heart commenced to beat and the patient to respire. She was saved. The operation was not terminated. The cloth which had been applied was of such a heat that a large blister was raised at the seat of its application.

Sterility in Males.

In a recent séance of the Société de Biologie (May 14th), M. Sinety said that sterility in families was generally considered to be the fault of the wife; while, if a careful observation was carried out, it would often be found that the husband alone was to blame. Microscopical examination often shows the absence of spermatozoa, and their presence does not always demonstrate the fecundity of the individual.

M. Sinety practiced, on several occasions, artificial fecundation, without success, and subsequent examination of the sperm demonstrated that the spermatozoids, very shortly after emission, were deprived of movement.

He has observed four cases where he considered the sterility due entirely to this want of activity of the spermatozoids, which had not sufficient vigor to reach the external third of the Fallopian tube.

All the individuals were young, but two were phthisical, and the two others of feeble constitution.

Ethereal Castor Oil.

M. Prodam, a pharmacien of Fiume (Austria), has obtained from the castor seeds, by treating them with ether, not only the oil, which would not be purgative by itself, unless it contained some of the active principle known as *ricinine*, but his solution also contains this principle in larger proportion. He is thus able to get the purgative effect of the oil by a smaller dose, and without the disagreeable taste of the ordinary oil. His preparation has further the advantage of being miscible, in any proportion, with water, coffee, or milk.

Simple Remedy for Chafe.

Dr. Powell, of La., sends us the following:—

Bathe parts well in tepid water, dry well with soft cloths, and apply, by means of a soft sponge or cloth, the following:—

℞. Zinci acetatis, grs. xv
Morphiæ acetatis, grs. ij
Glycerin,
Aq. rosæ, āā ℥ ij. M.
Ft. sol.

Sig.—Apply to chafed parts twice or thrice a day.

I have found after a day's use of the preparation it gave great relief. The solution should be diluted according to age. The above is especially applicable to chafe on the inner part of the thighs of *fleshy* persons and infants, who are more or less subject to the disorder.

Special Reports.

NO. XIII.—NEW MECHANICAL AIDS TO DIAGNOSIS.

It is a truism to say that the scientific treatment of disease rests primarily on recognizing what disease we have to treat. Hence the all importance of Diagnosis. Every aid to our senses, every instrument of accuracy which can be applied to the measurement of symptoms, is a gain toward therapeutics. Of late the additions to our means of diagnosis are numerous, and even wonderful. They all deserve close attention. We may begin with

The Ophthalmoscope in General Practice.

Its value, in general, for the detection of cerebral and other disease is now universally acknowledged. An instance in point, and not an unusual one, is given by Dr. F. J. B. Quinlan, of St. Vincent's Hospital, Dublin, in a recent address. He says (*Med. Press and Circular*):—

During the present month you have seen a striking example in the case of a tall, athletic sergeant of police who was admitted for neuralgic pains in the head. An ophthalmoscopic examination, in search of some possible cerebral derangement, revealed not this, but the now well-known retinal appearance of albuminuria, a malady of which he did not exhibit the slightest ordinary appearance, or of which we had not the least suspicion. A chemical examination of the renal secretion proved that the formidable malady described by Dr. Bright was present; but, taken in time, it yielded to treatment. A few years ago it could not have been detected, unless by accident, until it had reached a stage where it would have clearly displayed itself, and where recovery would have been difficult, if not impossible.

Other instances, in considerable number, have been reported in various journals: The visible pulsation of the retinal arteries in the aortic valve disease, of Corrigan, and other forms of heart disease, are capable of similar detection; so, also, is inherited contagious disease, purpura, and the early stages of locomotor ataxia. In fact, the ophthalmoscope places under our view a process of living brain and transparent blood vessels with the blood going on; and, without its aid accurate diagnosis of brain disease is hardly possible. The use of the instrument in general medicine is a recent idea now being worked out, and ere long will yield results of great importance.

The veteran Professor, E. Bouchat, in the *Paris Medical*, 5 Jan., *et suite*, gave an able review of medical ophthalmoscopy and "cerebroscopy." He lays down four pathological laws, which may be briefly summed up to mean that all cerebral, cerebro-spinal, spinal, and diathetic maladies determine certain phenomena of the circulation, and special lesions, which are recognizable by the ophthalmoscope. In the last mentioned class are included syphilis, tuberculosis, leukemia, albuminuria, and glycosuria; they produce neuro-retinitis and diathetic choroiditis. He gives full details of cases in which such obscure lesions as cerebral tumors, spinal sclerosis, chronic hydrocephalus, tubercles of the choroid, etc., have been accurately diagnosed during life.

The most recent monograph on the subject of ophthalmoscopy is "A Manual of Ophthalmoscopy for the Use of Students." By Dr. Dagunet. Translated by C. S. Jeaffreson, F.R.C.S. London: Churchill, 1880.

The Binaural Stethoscope.

The sounds of the lungs and heart are unquestionably rendered much more distinct by having them conveyed to both ears simultaneously, than to one only. It is not easy to explain the general use of one ear, except that it is through indolence. Of late binaural stethoscopes have justly come into favor among accurate diagnosticians. One of the best of these is that devised by Mr. William Snowden, of this city, which has already been described in this journal. The inventor claims that the sounds are transmitted with equal clearness to each ear; that as the rubber conducting tubes are free from woollen or silk coverings, friction sounds from this source are avoided; the ear pieces of soft rubber exclude extraneous sounds, and it is readily adaptable to all positions, both of the patient and the physician.

The acoustic principles are carefully observed in its construction, and as it has been in use now for a year or more, it may be said to have proved its utility. Certainly, those who accustom themselves to a good binaural stethoscope will not return to those adapted for the single ear only.

The Chromatroscope.

A paper by M. de Grandimont, on an experimental process for determining the sensibility of the retina to colored luminous impressions, was read on May 23d, before the Academy of Sciences, Paris. The instrument employed is called a chromatroscope. The observer looks steadily at the central point of a disk having apertures. At a little distance from the other end of the disk colored surfaces are placed. Gradually the sensation of color is lost. If, then, white surfaces are quickly substituted for the colored ones, the complementary colors come out with great brightness and purity.

The Spectroscope.

There is no doubt but that one of the important coming aids to medical investigation is the process of spectrum analysis, which has accomplished such marvels in solar and stellar chemistry, but which has up to the present been resorted to in physiological more than in medical research. Its medical application has lately received an impulse by the publication of "*The Spectroscope in Medicine*," by Dr. CHARLES ALEXANDER MACMUNN, of Wolverhampton, England. This volume gives a clear account of the theory and practice of spectrum analysis; it describes what has already been effected for physiology and medicine, and indicates the still greater *rôle* which this instrument is destined to fulfill. To use the concluding words of the author, "There is no doubt that when the spectroscope comes to be used more extensively than it has been hitherto, a great number of pathological absorption spectra will be discovered; and it remains for those who have abundant clinical opportunities to do their share," a remark which derives great force from the striking results obtainable from the spectroscopic examination of pathological fluids with the aid of proper chemical reagents. The spectroscope has been used in various hospitals, and about two years ago an excellent method of detecting the presence of bile by its means was discovered. This test is equal in accuracy and delicacy, and superior in simplicity, to any of the chemical plans, and enables the visiting practitioner to at once verify the presence of bile in the secretions by simple inspection, and to avoid the trouble of carrying chemicals about with him, or else bringing the secretion to his laboratory.

The Œsophagoscope.

For the purpose of examining the walls of the œsophagus Dr. MORRELL MACKENZIE has devised an œsophagoscope of simple construction. It consists of two parts—a stem and a skeleton tube. The stem is made up of a handle and a shank, between which there is a hinge. The skeleton tube is only formed when the instrument has been introduced into the gullet; before that it consists of two flattened wires placed anteriorly and posteriorly, connected above and below, and at certain intervals between these points, by rings. When the rings lie in the vertical position the wires are separated from each other only by the thickness of the rings; but when the latter are thrown into the horizontal position, the two wires become separated, and, with the rings, constitute a kind of skeleton speculum. At the top of the back wire there is a slot, into which the stem of a laryngeal mirror is fitted. The handle and shank are almost in a line—a position which greatly facilitates the introduction of the instrument. When the 'body' has been passed down the œsophagus, the operator, holding the handle in his hand, but leaving the index-finger free, presses with the latter on the upper part of the shank near the handle. The result of this is to turn the rings from the vertical to the horizontal position, and thus to open the speculum and expand the gullet. With this instrument the œsophagus can be inspected from three to five inches down, and local applications can be made to ulcers, etc.

The Psychrophor.

In these days of 'scopes, a means by which we can obtain at once a cold and a clear light is a valuable discovery. Such an invention is among the recent additions to our resources. At the Congress of German Surgeons, lately held in Berlin, Dr. MICHAEL, of Hamburg, exhibited an apparatus he used for the purpose of illumination, without the aid of lenses or reflectors. It consists of a glass globe, exhausted of air, and containing phosphorescent substances in powder. These substances are made luminous by means of an aluminium electrode, which is brought into contact, by means of a hard-rubber handle, with a Rhmkorff's induction machine. The light can be regulated according to the strength of the inductor; with a weak apparatus, sufficient light is produced to enable small print to be read, when held near the eye. In its present form the instrument, which Dr. MICHAEL terms the psychrophor (cold light), is regarded by him as suitable for illumination in operations on the abdominal cavity and vagina, when the parts are not accessible to daylight. He hopes also to be able to make it available for cavities with narrow orifices.

An Extra-Sensitive Thermometer.

PROFESSOR DUFOUR, of Paris, has devised a small thermometer, so sensitive that it will denote, by a deflexion of the index needle of nearly two inches, the entrance of a person into the room where it is placed. The apparatus consists of a short bent tube, carrying at one end a bulb, which is coated externally with lampblack. The tube is partially filled in the lower part of its bend with mercury, and is balanced on a steel knife blade, exactly like the beam of a scale. Above the knife edge extends an index needle, which moves across a graduated arc, as the bent tube swings. Beneath hangs a rod, to which is attached a small weight, to balance the needle, so as to make it point to zero on the arc. When

the temperature rises, be it ever so slightly, the heat, being absorbed by the lamp-black, dilates the air in the bulb, and drives the mercury to one side. The centre of gravity of the apparatus being displaced, the bent tube is put out of level, and the needle will immediately turn toward the right. When, on the contrary, the temperature decreases, the needle will point toward the left.

The Sphygmograph.

In some quarters the complaint has been heard that the tracings of the sphygmograh have not thrown as much light on disease as was expected. This subject came up for discussion last fall, before the St. Louis Medical Society, and we extract from the reports of that Society, in the St. Louis *Medical and Surgical Journal*, some sensible observations on what can properly be expected of this instrument:—

Dr. Baumgarten observed that the sphygmograph cannot diagnosticate a case of Bright's disease, or disease of the heart, but it may lead to, and assist the diagnosis. It is of the greatest value in determining certain points about the circulation, and is sometimes invaluable in prognosis. Of course, in order to derive all the advantages the instrument is capable of, we must learn in the first place how to take perfect tracings, and next how to interpret them correctly.

Dr. Papin thinks that if the instrument is of no more use than to make a normal tracing when the heart is abnormally affected by indigestion or otherwise, and so quiet the fear of the patient, it accomplishes a great deal.

Dr. Baumgarten.—With regard to the value of this instrument in determining organic disease of the heart, we can readily see what will be the effect of organic disease of the heart on the pulse tracings. In aortic disease, the effect upon the pulse tracing is very direct. In mitral disease, the influence upon the circulation is not immediate, and so long as the vigorous ventricle can compensate the mechanical defect of the valves, it may be that no change whatever is produced in the tracing. Disease of the right heart, finally, can have no *characteristic* influence upon the tracing of the radial pulse. It is true that these considerations may sometimes be used to determine the exact nature of a valvular defect, when the physical signs alone would not determine it.

Dr. Bryson said that the mere fact that the sphygmograph can be used to determine high aortic pressure when it exists, is of great advantage in clinical medicine. A patient with habitually high blood-pressure will bear fever badly; the heart will be apt to give out.

The Thermograph.

Under this name the *Scientific American* notices the invention of an instrument capable of recording automatically the rise and fall of the temperature of the body, for a given length of time. Its principle is, causing the electrical resistance of a fine powder in a tube to vary by means of pressure from heat. A vulcanite tube is filled with a fine powder made of plumbago, gas carbon and silver; these contents abutting at either end against a platinum knob. One knob is attached to a hard-rubber bracket, and the other (which imparts the varying pressure) to the free end of a spiral spring, constituting the thermometer proper. This spring is made of two slips of brass and steel soldered together, the brass occupying the outer side. The more expansible brass, on rise of temperature, causes the free end of the spring with its terminated knob to twist, and so exert increasing pressure on the tube-contents. An electric current is sent through the substance in the tube, entering and leaving by binding posts, and its variations with the varying pressure effect an ingenious electromagnetic mechanism, which produces on a moving surface a sinuous line, the graphic representation of the changes of temperature. The thermometric part of the apparatus is suitably enclosed in a circular, perforated, German-silver case, which is secured in proper position in the arm-pit. Dr. ADAMS, of Colorado Springs, the inventor, is arranging to obtain on the same slip of paper not only a curve of the febrile condition of the patient, but also a sphygmographic and respiratory curve, so that the inter-relationship of these cardinal symptoms under varying circumstances may be easily studied.

The Tocograph.

A method of accurately measuring the contractile efforts of the uterus would have important results in obstetrics. To effect this the "graphic method" has been recently applied, by M. POULLET, to the study of the dynamic phenomena attending expulsion of the fœtus. From experiments made with an instrument of which he is the inventor, the tocograph, he has arrived at the conclusion that the force expended by the uterus is equal, usually, to about forty pounds, never exceeding fifty pounds.

M. POLAILLON, in a report to the Soc. de Chirurgie on M. POULLET'S memoir, stated that, with a similar instrument, he had found the intra-uterine pressure to be about thirty-five millimeters of mercury. He also studied the uterine contraction, which during labor is slow and painful. The contraction lasts 106 seconds; during its continuance the ascending curve (courbe) is relatively short, thirty-eight seconds. The pain lasts but half as long as the contraction; it commences when the mercury has mounted to twelve millimeters and disappears before the contraction is completely finished. M. POLAILLON de-

termined that when the orifice (os) is dilated to about five inches diameter, the pressure which brings about the expulsion of the head amounts at least to twenty pounds for each contraction.

Correspondence.

Failure of Carbolic Acid Injections for Hemorrhoids.

Ed. Med. and Surg. Reporter:—

The medical journals have, for some time, teemed with reports of hemorrhoids successfully treated by carbolic acid injections. Unfortunately the failures have not been recorded. I have had a failure, and am disposed to think others may have been alike unfortunate. Case.—E. B, age fifty, female, disease of recent occurrence and short standing. She assures me that during her child-bearing she never suffered from piles.

When first examined there were three soft, exceedingly tender, tumors, protruding from the anal orifice, ranging in size from a common currant to a cherry, though not quite the shape these objects indicate. To return these within the sphincter ani was very painful, and when returned they would only remain inside until the next defecation.

The bowels were regulated by

℞. Cream tartar,
Flor. sulphur, āā ℥ ij
Glycerine, q. s.
Make into a confection.

Sig.—A sufficient amount to be taken every day to keep the bowels moderately open.

The patient was directed to bathe the parts in hot water after each movement, return the piles, and anoint the parts with the following:—

℞. Tannin, ℥ j
Ext. belladonna, ℥ ss
Cosmoline, ℥ j.
Make into an ointment.

She was to push a small amount of this ointment into the bowels. This course of treatment hardly amounted to a palliative, hence it became imperatively necessary, as her suffering was great, to consider the radical cure of the condition.

The patient was of large frame, slightly inclined to corpulency, of a healthy and robust family, had always enjoyed good health, and had not the usual history of costive habit of bowel that precedes hemorrhoids so commonly. She was excessively nervous, was afraid of chloroform, and could not be brought to consent to the ablation of the tumors by the knife or scissors. Hence I concluded to try injecting them with carbolic acid. One of the piles was selected, and three drops of a fifty per cent. solution carefully introduced, producing intense pain, that lasted for hours, necessitating a hypoderm of morphia. At the end of about four days suppurative inflammation had taken place and the pile was destroyed.

I was not satisfied with the method. It caused too much suffering, and ending with suppuration, gave me the image of a possible rectal fistula to follow. I now urged the use of the scissors for the removal of the two remaining tumors. My patient was firm in her refusal to submit to anything but the injections. Accordingly the second one was in due time treated precisely as the first had been, with the patient, however, under chloroform this time. Result, pain and inflammation, but no suppuration or breaking down, no shrinking or shriveling up; on the contrary, it had been converted from a soft pile, that could be returned within the sphincter ani, into a hard and very painful one, that could not be returned. But the third one, that had not been meddled with, had apparently disappeared.

My patient was now suffering so much that she reluctantly consented to its removal with the scissors. She was brought under chloroform, and with a finger in the rectum, to steady the parts and bring the tumor into sufficient prominence, it was removed by a clip, with a stout pair of flat-curved scissors. The other one was searched for, but could not be distinctly made out. This wound healed kindly, and did not give my patient nearly the pain the carbolic injections had done. But our troubles were not at an end, as ten days sufficed to bring out the remaining pile very prominently; this was then also removed by the scissors, and healed kindly.

But still the patient had pain and uneasiness in the structures about the anus. Some ten or fifteen days after the last operation sufficed to reveal what was following, viz., fistula in ano. This has just been laid open with the knife, in the hope that we are near the end of the chapter.

Upon the whole, I think, I shall never inject carbolic acid into hemorrhoids again. I have also a suspicion that the injections of carbolic acid may have acted as, at least, the exciting cause of the fistula. Will some one else report their failures with this method of treating piles?

Colorado. G. Law, M.D.

News and Miscellany.

The Pennsylvania Registration Law.

In the Reporter for June 25th we published the full text of this Act. But so many inquiries have been made about its various clauses that we think it well to publish some explanations of its sections, furnished us by Dr. R. L. Sibbet, Chairman of the Committee on Medical Legislation. Referring the reader to the number for June 25th, p. 708, for the text, we insert the following commentary:—

Section 1. The Prothonotary shall purchase a book of suitable size, and shall keep it in his office for inspection by the public. He "shall set apart one full page for the registration of each practitioner." This does not mean that he shall use two pages for the registration of each practitioner. The affidavit is part of the registration, and must follow it immediately, and must not be made on a loose sheet of paper, now offered for sale at $2.00 per hundred. The prothonotary must leave a space at the bottom of the page for a note when the practitioner removes from the county or departs this life.

The Register is a record book, and must not be filled with items of information not required by the law.

SEC. 2. There are two principal classes of practitioners provided for, those with the degree of Doctor of Medicine and those without it. They are placed under equal obligations.

(*a*) The practitioner who has a diploma must show it to the Prothonotary. He must make a true copy of it and make affidavit to the genuineness of the diploma, and the correctness of the copy, and sign the affidavit. If he has lost his diploma and can present a true copy he must make affidavit to these facts and then ask to be registered. But if he cannot present a true copy of his diploma, then he must present a certified statement, giving the name of the institution that issued the diploma and the names of all the professors whose lectures he attended, and the branches of study on which they lectured. The practitioner who shall commence to practice medicine in this Commonwealth with a diploma issued by an institution in any other State or foreign country must have the diploma endorsed by one of the medical faculties of this State, after which he may apply for registration.

(*b*) The practitioner who is without the degree of Doctor of Medicine and has been a resident practitioner in Pennsylvania since 1871, must present a statement and must make affidavit to it, after which he may register; otherwise he must stop the practice of medicine.

SEC. 3. Each practitioner must sign two affidavits, the one to be filed and the other to be recorded on the page of the Register.

SEC. 4. The Prothonotary must file the certified copies of the diplomas and the certified statements in his office, and he must register the practitioner. He must not give a "Medical Certificate," such as have been offered for sale at $1.50 per hundred, but a receipt for one dollar.

In regard to this city, we may add that in accordance with the provisions of the Act, Wm. B. Mann, Esq., Prothonotary of the Courts of Common Pleas, has just opened a book for the registration of all practitioners of medicine and surgery in the county. The book, which is known as the "Medical Registry of the County," is in charge of Clerk S. B. Hoppin, No. 9 State House Row.

The Chicago Faster.

At noon on July 12th, "Dr." John Griscom, at Chicago, Illinois, reached the end of his fast of forty five days. During the whole of that time, so it is said, nothing but water passed his lips. His commencing weight was 200 pounds and his health good. At noon, July 12th, just before he broke his fast, he weighed 147½ lbs., his pulse was 66, respiration, 15, temperature 98, general strength and condition good. About two hundred persons assembled to witness his successful close of his task. The hero of the day quietly walked around, superintending the arrangements, talking to the reporters, and even helping the waitresses to handle the articles of food, showing in the meanwhile no signs of unusual hunger or excitement. When the curtain went up the audience applauded heartily, and Griscom made a little speech, setting forth his well known views about fasting. He said he believed that much physical sickness and distress was due to overcrowding the system with food products, and he has attempted, and successfully, to show that abstention from food could be safely undertaken. He had once recovered, by reason of fasting, from an illness which the doctors had pronounced fatal. He did not advise promiscuous fasting, but desired scientific attention to be given the subject, with a view to hereafter obtaining any advantage there might be in it as a remedial agent. He was hungry, but not ravenous. Fasting was both a mental and a physical test. Will power had much to do with its success. He had ordered an elaborate menu, not because he expected to eat much, but to satisfy his imagination. as well as his appetite.

He then, amid renewed applause, sat down, and, with the words "Here's looking at you," lifted a glass of milk to his lips and slowly drank a gobletful. Turning out another glass, he took a few swallows more, and then turned his attention to the milk toast, eating very deliberately, and stopping to chat with his companions on the stage. "How does it taste?" shouted one of the spectators. "Very good, I assure you," was the reply! "But I really do not feel more hungry than if I had fasted but a day or two."

Whether this fast was as rigid as it purported to be, we do not know, but taking for granted that it was, the result is quite interesting in many respects. We do not sympathize with those who decry such experiments as foolish and useless. Properly conducted, they teach much of the powers and limits of endurance of the human body in health; and they can be considered useless only to those who cannot, or will not draw from them the lessons they are capable of conveying.

The Case of the President.

To the gratification of all good citizens and right thinking men everywhere President Garfield has steadily advanced toward recovery. It is probable that the wound was not so severe as was at first supposed. The liver and kidney appear to have escaped any actual laceration, though perhaps they were considerably bruised by the transmitted force of the ball.

An interesting and plausible theory of the injury has been published by Prof. Faneuil D. Weisse, of New York. He has stated his belief to be that, by some fortuitous circumstance, the ball had been deflected from its course by striking and fracturing the eleventh rib; that it had passed along the anterior surface of the transversalis muscle, which forms the interior muscle wall of the outer half of the loin, passing between the transversalis muscle posteriorly and the kidney and ascending portion of large intestine anteriorly; thence into the iliac fossa, between the iliacus internus muscle—which forms the bed of the right groin—posteriorly and the cæcum or commencement of the large intestine anteriorly; thence continuing downward and inward, through or behind the psoas magnus mus-

cle, to the right side of the lower cavity of the abdomen, there inflicting an injury to one or more of the nerve trunks of the sacral plexus.

Experiments on the cadaver and the course of the symptoms have rendered these suggestions probable.

The interest that has been taken by the public in the minor details of treatment has been great, and has also been quite instructive to them, giving many, no doubt, the first correct notions of the antiseptic treatment they have ever had.

It is to be regretted that any report of a lack of harmony among the professional attendants should have been given publicity. It is easy to magnify such occurrences and give them a much more sensational coloring than they really have.

The Hot Spell and Its Fatality.

The great heat of this month has run up the mortality in all the large cities. Temperatures of 103° and 105° in the shade were reported from Louisville, St. Louis, Cincinnati and elsewhere. In New York city the deaths in the first week of the month ran up to 1144, which is nearly double the average. Most of this increase is among children and in thickly settled districts. The Board of Health has begun a thorough campaign among the tenement houses in all parts of the city, and for that purpose the services of some fifty young physicians have been engaged. Each received a pad of prescription blanks, a note book, and a quantity of tickets for free excursions, the latter to be distributed among the sick poor, where, in their judgment, they may be needed. Avoiding interference with private practice, they are to treat sick children with care, and advise distressed mothers. Their prescriptions, in all cases, are to be free of charge. If a bad sanitary condition prevails in any house they are to report the fact at once to the regular Health officers, and weekly reports of what they may observe otherwise are to be made to the Health Department. The city, for the purposes here indicated, is to be divided into fifty districts.

Deaths from sunstroke, at the rate of twenty to thirty a day, were reported from St. Louis, Memphis, Louisville, and Cincinnati.

The Plague.

It appears from recent observations that the plague which, since last November, has been destroying large numbers in the Euphrates Valley, is, in fact, a continuation of the same epidemic which in 1877 extended into Russia. It can even be traced back to 1858, when it first appeared in Mesopotamia after it had been thought to have been extinct for more than a century. It is capricious in its travels, sometimes extending rapidly, at others slowly, sometimes ravaging country districts and sparing cities, at others prevailing chiefly in the latter. The present epidemic presents the usual symptoms, to wit, excessive lassitude, anorexia, high fever, ardent thirst, headache, fuliginous tongue, haggard look and glassy eyes, diarrhœa, vomiting of blood, bloody urine, buboes in armpits and groins, petechiæ, and latterly carbuncles, prostration and death after twelve, twenty-four, or forty-eight hours' illness. It shows itself especially as a house epidemic, attacking and killing several members of one family.

The Smallpox.

The ravages of this disease continue to extend in spite of the warm weather, which usually checks it. In New Brunswick, New Jersey, thirty cases were reported in the first week of this month. A sudden increase of the disease occurred at the same time in Jersey City; eight new cases being reported in one day. The *Every Evening*, of Wilmington, Delaware, says, "The smallpox is increasing in this city, simply through the lack of proper measures to check its extension." A special hospital, it adds, is imperatively demanded. In Havana, Cuba, fifteen deaths from the disease occurred during the first week in July. Weekly deaths from it continue to appear in the Philadelphia mortality returns. It looks as if some united and determined measures would have to be taken. Shall vaccination and revaccination be made compulsory?

Resection of the Stomach.

After eating some fish, a young man in Geneva, Switzerland, was attacked with acute pains in the stomach. As they did not yield to the usual remedies, the attending physician, Dr. Wagner, inspired by the example of Billroth, promptly opened the abdominal walls, slit up the stomach, and removed some fish bones which were attached to its sides! At last accounts the young man was progressing favorably. This incident, gravely given in the *Allgemeine Med. Central Zeitung*, June 4th, if true, is an astounding example of reckless surgery. But perhaps it is intended for what Artemus Ward called "a goak."

The Yellow Fever.

The Marine Hospital Service, at Washington, was advised, on July 9th, that "two or more cases" of yellow fever had developed on the British bark Emma Paysant, from Vera Cruz, in quarantine at Pensacola.

In Havana, the deaths from this disease numbered twenty-three during the first week in July. Scattered cases have been reported by the United States Consuls in Barbadoes and Porto Rico, since May 1st. The fever is, however, not regarded as epidemic in either of these islands.

Homœopathic Items.

—The regular profession in Germany have appealed to the authorities to prevent homœopathic physicians dispensing medicines, as is the case with others. The appeal, however, has not been sustained.

—A medical paper at Leipsic has been fined 100 marks and the costs of suit, brought by seventy-five homœopathic doctors, for publishing a lecture before a Berlin medical society, in which

homœopathy was denounced as quackery and swindling.

—The homœopathists are holding an International Convention in London. The first session was held July 12th. Dr. Hughes, President of the Convention, said it was a bold thing for men to make an appointment to meet again in five years, as they did in Philadelphia in 1876. Dr. Hughes made several practical suggestions, the most important being that there should be one homœopathic pharmacopœia for all countries. A discussion followed upon the condition and prospects of homœopathy in which Drs. Tolbert and Degersdoff, of Boston, Massachusetts, and Dr. James, of Philadelphia, participated.

Cremation.

On June 2d the fiftieth cremation was carried out in the crematory at Gotha. It is found to be somewhat expensive, as it costs a minimum of nearly fifty dollars for fuel, use of apparatus, coffin and pay of attendants. Were it not for this it is believed the number would have been much greater.

Personal.

—Dr. J. M. Toner, of Washington, D.C., has sailed for Europe, as one of the Delegates to the International Medical Congress.

—At the annual meeting of the Trustees of Harvard College, July 13th, Henry W. Willard, M.D., was elected Professor of Ophthalmology, and James C. White, M.D., Professor of Dermatology.

Items.

—The Publication Committee of the International Medical Congress expect to spend $30,000 on the publication of its Transactions. The volume will be something unique at this rate, at least in paper and pictures.

—A woman in Jackson County, Tennessee, is said to have been delivered, on June 20th, of *seven* children at one confinement, all girls, weighing from four to five pounds each. The authority for this tough story is the Nashville correspondent of the Louisville *Courier Journal*.

—Hermaphroditism seems to be far from uncommon in Paris. At a recent meeting of the Société de Chirurgie, M. Magitot showed an individual, aged forty, who had originally been brought up as a female, and was married as such at the age of seventeen. Since then this person has become a widow (?), and a total change of sex has occurred.

—At a recent anti vivisection meeting in London, Cardinal Manning declared that "so long as life was granted to him he would do his utmost to put an end to the detestable system of vivisection, which, since it could not be properly controlled by law, ought to be totally abolished." At the same meeting the Lord Chief Justice of England, who is not a medical man, declared that he was a "reluctant and unwilling, but at the same time a complete and absolute convert to this view of the subject."

OBITUARY NOTICES.

—Dr. W. Scott Hendrie, a well-known physician in Holmesburg, Pa., died at his residence in that place on Sunday, July 10th, aged about forty-five years. Dr. Hendrie was the chief physician at the House of Correction, having been elected March 10th, 1873, and served continuously until his death.

—Prof. George Rolleston, M.D., of Oxford, England, died June 16th. He was an able lecturer and writer on physiology. Several of his works, especially his *Forms of Animal Life*, have been highly appreciated.

QUERIES AND REPLIES.

Simmons' Liver Regulator.

To *W. C. G., of Tenn.*—The recipe for Simmons' Liver Regulator is, or ought to be, as follows:—

℞.	Sennæ comp.,	℥ij	
	Serpentaria root,	℥ij	
	Golden seal root,	℥j	
	Manna,	℥j	

For a one-dollar package, worth in St. Louis 0.08¾.

This I find in a druggist's private recipe book, and corresponds with my recollections when living in the same village with Dr. M. A. Simmons. F. F. P.

Comanche, Texas, June, 1881.

Muscular Rheumatism.

Mr. Editor.—I would suggest, in reply to H., of Iowa, the following prescription:—

℞.	Pot. et. sod. tart.,	℥ij	
	Pot. nitrat.,	℥j	
	Pot. iodid.,	ʒss	
	Fl. ext. colchic., (U. S. P.),	ʒss	
	Aquæ, q. s.	Oj.	M.

Sig.—One tablespoonful three times per day. Dover's powders, grs. x, as may be necessary to control the bowels and procure rest.

For chronic muscular rheumatism I would suggest the chlor. ammonia and arsenic, say—

℞.	Chlorid ammonii,	℥j	
	Acidi arseniosi,	gr. iss	
	Aquæ, q. s.	Oj.	M.

Sig.—Tablespoonful three times per day.

℞.	Sulphate quinine,			
	Dover's powders,	aa	gr. vij.	M.

Sig.—At once, on going to bed.

South Carolina, July, 9th. T. B. Hinnant, M.D.

Dr. S. T. L., of Ohio.—Yes; Ziemssen's *Cyclopædia* has undergone a second and revised edition in Germany, with many valuable additions; but there is not the slightest probability of its being revised in this country.

Dr. J. J. S., of La.—The papers and pamphlets have been received and will be carefully examined. Thanks for them. We are always glad to receive material which can be made of interest to the profession.

Mr. Editor.—Accuracy on the part of physicians, in observation and description, is surely of first-rate importance. Now, L. L. Doty, M.D., of Mosiertown, Crawford Co., Pa., is an example to which I call attention. If he is inaccurate in one feature of what he says he observed—in his *lusus naturæ*, the *sheep baby*—he is possibly unreliable in other and more important features. He says the "central incisors in both jaws were such as is seen in the lamb." Well, who ever saw incisor teeth in the upper jaw of a lamb, or a sheep either, for that matter? B. F. S.